

# DEVELOPING SKILLED LABOUR: AN ANALYSIS OF THE MAJOR FACTORS WHICH ENABLE AND HINDER EMPLOYEE TRAINING IN CONSTRUCTION COMPANIES IN VIETNAM

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## **Statement of Authentication**

The work presented in this thesis is, to the best of my knowledge and belief, original except as acknowledged in the text. I hereby declare that I have not submitted this material, either in full or in part, for a degree at this or any other institution.



Huynh Quang Minh

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#### Abstract

This thesis makes a contribution to the literature on training practices and attitudes, within the context of the Vietnamese construction industry. Drawing on the international scholarship in the area of training practices and attitudes, the thesis tests a series of hypotheses about the nature of training in Vietnam. The conceptual framework for the thesis utilised the established methods and insights from a range of studies on the relationship between training provision, company size, company ownership, and attitudes of managers. Within this scholarship, the nature of those relationships is still unclear and under-theorised in particular contexts. Specifically, the international research suggest particular patterns of training provision, namely that larger companies will be more likely to provide off-the-job training. It was unclear, however, whether these findings, and the key theoretical premises that underpin them, had application to the Vietnamese construction industry. This thesis, therefore, makes a valuable contribution to this area of research in attempting to deal with these issues.

In the context of the discussions and debates within the literature, the specific contribution of the thesis spans a number of dimensions. First, it has generated, presented, and analysed a new data set about the general characteristics of training practices in the Vietnamese construction industry. Based on a survey of 510 construction companies in Ho Chi Minh City, this is the largest database to analyse training within Vietnam, and the largest database to document the construction industry. Second, it has applied statistical analysis and methods consistent with examinations of training practices evident in the international scholarship, and thereby extended the study of the construction industry in Vietnam beyond anecdotal information and simple descriptive statistics. In this sense, the use of such a large database to focus on one industry is particularly valuable. Third, it has interpreted these results and findings both in the context of the international literature, but also noted the relevant features of the local context in which these results are observed, i.e., an economy that is in transition from high level of central control to one that is developing a market orientation.

The specific findings of the thesis are interesting and extend across the range of issues emphasised in the international literature on training. The thesis affirms the role of training in developing skilled labour in the Vietnamese construction industry and indicates that training fulfills this function of developing human capital for different sized companies and companies with different ownership structures. The thesis demonstrates that company size has some correlation with training provision in the industry, although there is some divergence with the international literature in this regard. In the context of a transitioning economy and increased levels of foreign investment, the thesis makes a key contribution in understanding the pattern of training provision by company ownership type and examining in particular the impact of foreign capital in shaping training provision in Vietnam. Indeed, the results demonstrate that ownership type exercises a distinctive effect on training provision with a higher evidence of training in foreign invested companies than in other company types. In considering the attitudes of managers within the construction industry, the results show that managers of construction companies have positive attitudes towards training and the utility of training for a series of strategic purposes. These attitudes were evident despite the absence of a sophisticated training infrastructure. Company size was not a significant differentiating factor in the attitudes of managers. Company ownership was a greater predictor of the strength of positive attitudes by managers with the managers of foreigninvested companies demonstrating more positive attitudes towards training than managers in other company types.

The findings of the thesis facilitate a more nuanced understanding of key premises in the research scholarship about training. The fact that some of the patterns commonly observed in the international literature are not entrenched in the Vietnamese construction industry identifies the benefits of industry-based research. However, these findings might also reflect the transition of the Vietnamese economy more generally from a centralised, controlled economy to a market economy, noting that this transition is unlikely to be uniform and that companies will move to adopt human resource development practices at different rates. One final issue identified and discussed by the thesis is that despite the affirmations of training demonstrated by manager attitudes, the Vietnamese construction industry in Ho Chi Minh City confronts persistent skill

shortages. This dissonance contributes to the development of recommendations to policy makers, and to the industry leaders more generally, as to the potential to facilitate and support successful training policies and human resource functions for the range of construction companies in Vietnam.

### **CHAPTER 1: INTRODUCTION**

#### **1.1 Introduction**

This thesis addresses employee training practices in the Vietnamese construction industry. A key purpose is an assessment of training delivery, by way of scope, type and recipient. A related purpose is an improved understanding of the drivers of employee training, alongside the expectations and attitudes that are held about training by managers. The direction of the thesis is shaped by contexts and nuances in existing research scholarship about training; such contexts include the question of universality in the way organisations structure and deliver their training and their expectations as to its impact. The context or setting for the thesis also helps to explain its rationale, noting that Vietnam's status as a rapidly developing economy is shaped by the contribution of the Vietnamese construction industry. The construction industry also bears the imprint of foreign direct investment, an indicator of foreign capital's assessment of the anticipated growth of the construction industry. Despite the significance of construction to Vietnam's economic growth, there is limited research on training practices in the Vietnamese construction industry, including attitudes towards training and its capacity to assist organisational development and competitive advantage.

Before going into details of the current thesis, its background will be reviewed. A key contextual framework is provided by economic development in Vietnam and changes in the Vietnamese economy. Vietnam has achieved positive results in economic development, with a contributing influence being the change from a command economy system with a centrally planned economy to a market economy system that that has been titled 'a socialist-oriented market economy' (Nguyen, TD 2012, p. 1). The influence of state-owned companies has lessened and there is evidence of much greater diversity in forms of company ownership. This diversity includes state-owned companies, local private companies, joint-stock companies, and foreign direct investment (FDI) companies (Mayer Brown 2014).

According to Mai, Yang and Nguyen (2014), over the period 1991–2011, Vietnamese gross domestic product (GDP) growth at 7.34% per year was the highest in South-east Asia. This included 7.14% on average growth per year in the period from 2001 to 2011. Particularly noteworthy is the value of Vietnamese GDP in 2011 was 4.4 times as much as in 1990 and 2.1 times as much as in 2000 (Mai, Yang & Nguyen 2014).

The robustness of the Vietnamese economy, in the context of the impact of the global financial crisis, can be reviewed through an assessment of GDP in the period 2011–2014. In 2011, Vietnamese GDP growth stood at 5.89%. This growth rate did not meet the target growth rate of between 7% and 7.5% as planned by the National Assembly of Vietnam. However, it was still a high growth rate in comparison with the average growth rate of countries in the region, particularly in the context of nation-state economies recovering from the global financial crisis (Le, DD 2013; Mai, Yang & Nguyen 2014). In 2012, the GDP growth rate stood at 5.25%, a performance that continued to reflect of the impact of the financial crisis and the recovery evident in patterns of economic growth worldwide (Mai, Yang & Nguyen 2014). In 2013, the GDP growth rate increased to 5.42% demonstrating steady but positive growth of the Vietnamese economy (VCCI 2014).

For the year 2014, the GDP growth rate was 5.98%. This was higher than the growth rate of previous years (Ha, QH 2015; Nguyen, M 2014; VCCI 2014). This pattern of growth was also evident for the first quarter of 2015, with the growth rate in the Vietnamese GDP standing at 6.03%, which is higher than the growth rate for the same period of the previous three years (4.96% GDP growth rate for the first quarter 2014, 4.76% GDP growth rate for the first quarter 2013, and 4.75% GDP growth rate for the first quarter 2013. This pattern of growth indicated a period of positive momentum for the Vietnamese economy (Cao 2015; Ha, T 2015; Nhu 2015).

Consistent with the role of the construction industry in any country, it plays a key role in the Vietnamese economy, including its contribution to Vietnamese GDP growth. According to Phuong (2014) and Ngoc (2013), the growth rate of the construction industry was consistently higher than the growth rate of GDP in the wider Vietnamese

economy in the period 2011–2013. In 2011, the growth rate in the Vietnamese construction industry was 6.68%, compared with the GDP growth rate of 5.89%. In 2012 the construction industry growth rate was 5.75%, compared with 5.25%; and in 2013, the construction industry growth rate was 5.94% compared with 5.42% (Ngoc 2013; Phuong, K 2014).

The strength of the construction industry suggested by the growth rates in GDP is evident also in construction production. Construction production is interpreted here as the total production of the construction industry. This includes items other than physical buildings and works, such as 'as the value of materials and other inputs obtained from other sectors of the economy' (Ofori 1990, p. 34).

According to Trinh (2015), there was a significant increase in construction production in 2014 in comparison with previous years. The production value of the construction industry in 2014 achieved VND849 trillion (equivalent to USD39.36 billion), accounting for 6.0% GDP for the whole country (Trinh 2015). According to Phuong (2014), the production value of the construction industry in 2013 reached VND770.41 trillion (equivalent to USD36.6 billion), an increase of 7% compared to 2012, accounting for 5.94% of the country's GDP and is considered one of the positive factors in the economic growth of 2013 (Phuong, K 2014). The total production value of the construction industry in 2012 was VND720 170 billion (equivalent to USD34.47 billion), an increase of 9.6% in comparison to 2011. The available data for 2012 distinguishes the contribution of state-owned companies, non-state-owned companies and FDI companies to production value. In 2012, the production value of state-owned companies was VND112 918 billion (USD5.40 billion), from non-state-owned companies was VND583 136 billion (USD27.91 billion) and from FDI companies was VND24 116 billion (USD1.15 billion), data which demonstrates the influence of foreign investment (Anh 2013).

Analysis of the construction industry suggests that the increasing demand may be explained by three main reasons. The first concerns the rate of urbanisation, which increased steadily over the past two decades. The figures show an increase of 18.5% in

1989, 20.5% in 1997, 23.6% in 1999, 25.8% in 2004, 33.0% in 2010 and it is expected to grow by up to 45% in 2020 (Chu 2011). Urbanisation in 2012 stood at 32%. The residential house area on average at the national level was  $19.1m^2$ /person compared to  $18.3m^2$ /person for 2011. The total residential housing area was approximately 75 million m<sup>2</sup> in which 35 million m<sup>2</sup> was located in urban areas, 40 million m<sup>2</sup> in rural areas. The total social housing (housing for low income population) area was about 2.5 million m<sup>2</sup> (Trinh 2013).

The second factor concerned the high inflows of FDI capital. The FDI inflows to Vietnam have drastically increased since 1986, reaching a peak of USD11 500 million in 2008 relative to the preceding 21 years (Hai 2008). Thereafter contributions of USD10 000 million in 2009 (Quan 2009), USD18 500 million in 2010 (Huyen 2010), USD14 000 million in 2011, USD16 300 million in 2012 (Nguyen, L 2013), USD22 350 million in 2013 (Nga 2014) and USD21 920 million in 2014 (Le, H 2015). In 2015, FDI inflows for the first nine months were USD17 150 million, a level of investment that was 53.4% higher than that evident for the corresponding period in 2014 (Nghia 2015). In summary, although there are fluctuations in FDI inflows in the period 2008–2015, it is clear that that FDI inflow into Vietnam is an important source of investment in the construction industry and forms a key foundation for the development of the construction industry in Vietnam.

The third factor that explains the strength of the construction industry is its contribution to assisting Vietnam address the current overloading of the transportation system, including road, airport and seaport systems (TBAVietnam 2011). The significant demand for construction of new or revamped transport infrastructure systems was also identified and confirmed by the Vietnamese government. It was clearly stated in Decision No. 355/QD-TTg (25 February 2013), where the Vietnamese Prime Minister approved a strategy for the development of Vietnam's transport infrastructure through to 2020, with a vision towards 2030. The strategy emphasises the mobilisation of resources to invest in the development of transport infrastructure so as to assist the country meet the demand for sustainable development and create a sound foundation for

socioeconomic development, serving the industrialisation and modernisation of the country (Nguyen, TD 2013).

Despite these portents the construction industry is not without its challenges. The industry is highly labour intensive. According to Phuong (2014) and CleverJobs (2014), the construction industry employed nearly 5.2% of the Vietnamese labour force in 2013, including 2.5 million direct labourers (CleverJobs 2014; Phuong, K 2014). However, the rapid growth of the construction industry has provided some significant challenges in terms of workforce supply. In recent years, Vietnam has experienced shortages in skilled labour and management staff, shortages that are indicative of a series of interconnected problems in human resource development in Vietnam (VACC 2011).

To deal with the challenge of labour supply, the Vietnamese government has national strategies to support human resource development initiatives in organisations. For instance, the government has encouraged universities, colleges, vocational schools and companies to improve the quality of graduates, workers, technicians and professional staff (Truong & Nguyen 2007) through training. The Vietnamese government has also issued decrees and circulars which are expressions of its policy support for businesses in the area of human resource development. Explicit examples include Decree No. 56/2009/ND-CP (30 June 2009), promulgated by the government to prescribe support policies for the development of small and medium enterprises (Nguyen, TD 2009). In addition, the joint Circular No. 05/2011/TTLT-BKHDT-BTC (31 March 2011) issued by the Ministry of Planning and Investment in cooperation with the Ministry of Finance provides guidance on training support for human resource development of small and medium enterprises (Ministry-of-Planning-and-Investment & Ministry-of-Finance 2011). Furthermore, the Vietnamese government has offered free, short training courses specifically relating to the construction industry for a variety of purposes such as updating regulations and standards in design, construction and labour safety for construction companies in Vietnam (Hop 2014; TM 2014). The support available to construction companies for training from the government does not include widely available wage subsidies or sponsored training arrangements such as those that would be found through state sponsored apprenticeships. The available measures are not systematic and are most likely to be short-term in nature. In simple terms, these measures mean that companies in Vietnam receive a measure of support from the Vietnamese government in developing human resources. However, that support is insufficient to meet the demand of companies in addressing shortages in skilled labour. A pertinent factor is the evident high demand for skilled workers to address the modernisation, industrialisation and diversification requirements of Vietnam as identified in the 'Social-Economic Development Strategy' for the period 2011–2020 (Bodewig & Badiani-Magnusson 2014).

In summary, developing a skilled labour force has been clearly identified as essential for society in general and for the construction industry in particular. In terms of the government's role, it has confirmed that vocational and general training are key policy priorities (News 2011), a confirmation that is supported by identifiable policy decrees. The shortage of skilled labour has also been recognised by business organisations as a serious problem for Vietnam (VACC 2011; VNS 2012).

Although training has been the subject of policy and limited funding attention, there are still unresolved and contested issues relating to developing a skilled labour force through investment in employee training, in addition to questions regarding the degree to which companies invest in employee training. This controversy arises because there are different perspectives about the value of employee training for different types of companies in Vietnam. (Truong & Le 2007). As an example, managers of FDI companies tend to support employee training more than their counterparts in stateowned companies and local private companies because they consider training as investment (Le, CT & Truong 2005). Additionally key and unanswered questions remain concerning the extent to which companies actively invest in training employees for their own businesses and what training types are considered appropriate by managers for each type of business. Moreover, in terms of company size, the available research indicates that there are significant relationships between company size, training volume and the diversity of training (Lee 2012). Equally there are arguments that company size is not a determinant of training (Smith, A. & Hayton 1999), nor is company size positively associated with training practices (Smith, A et al. 2003). These questions are pivotal to this thesis, as it is important to understand their application to training delivery in the Vietnamese construction industry.

Prior to identifying the research problem that is addressed by this thesis some clarification about what is meant or implied by the term training is required. In short training is a broad term that in practice encompasses diverse approaches. Particular classifications of training that are routinely used in the literature are general and specific training, in addition to off-the-job and on-the-job training. These are outlined here as a means of clarifying the routine use of terms. General training is identifies as a means of enriching knowledge and/or capabilities that an employee can apply for their current jobs and other possible roles within the company and in the wider labour market. Specific training is more narrowly focused on an individual company's particular and contemporary needs and is therefore less portable and thought to be mainly exploited for increasing productivity of the specific company. Research about training also differentiates between on-the-job training and off-the-job training. For on-the-job training, it is broadly defined as 'the planned process of having experienced employees train novice employees on units of work in the actual work setting' (Jacobs, Ronald L & Jaseem Bu-Rahmah 2012, p. 76). On-the-job training methods can consist of assigning trainees as members of task forces, job rotation and apprenticeships (Jones, WM & Dexter 2014; Tung 2001). In contrast, for off-the-job training, it is defined broadly in the literature as the provision of 'opportunities on a variety of topics at a site other than where the work actually done' (Jacobs, R L 2003, p. 13). Off-the-job training methods can include lectures, group discussions, case studies, video tapes, simulations, courses at colleges or universities, vocational courses and overseas workshops.

#### **1.2 Statement of the research problem**

Although the Vietnamese government strongly supports increased employee training, a shortage of skilled labour remains a serious issue that concerns various business organisations in Vietnam (VACC 2011; VNS 2012). For the construction industry, two major problems are key themes central to this thesis.

The first problem is skill shortages that have been identified as a concern of both the

Vietnamese government and construction companies in Vietnam. This has led industry and government stakeholders to focus on employee training as a solution to this increasingly key problem. In terms of quantifying the skilled labour shortage, the Ministry of Construction of Vietnam assessed that the current number of trained employees in construction companies meets only 25% of demand for the construction industry. Further as the pace of construction industry growth rates have exceeded the growth rate in the economy as a whole, the demand for trained employees is expected to increase in order to meet the demand for skilled labour in the construction industry (Phuong, K 2014).

Moreover, although Vietnam has a rich supply of labour resources, there is still a shortage of skilled labour or trained employees for the construction industry. The shortage in skilled labour masks a series of problems. This includes not only the available supply of skilled labour but also difficulties faced in retaining labour. In Vietnam, the average staff turnover rate of all industries was 12.7% in 2014. The 2014 rate can be contrasted to that evident in the preceding three year period (2013 12.2%; 2012 13.8%; 2011 13.1%). The improvement in 2013-2014 is attributed to the gradual economy recovery (Dang 2012; Talentnet 2015). Staff turnover is identified as a concern in the construction industry because there is a movement of workers from the industry to other industries, as construction jobs are strenuous, located far from home and are characterised by low wages (Le, CT & Truong 2005).

In addition, the shortage underlines a persistent industry phenomenon whereby construction companies employ farmers who are untrained in construction skills yet are accepted to work as skilled workers. According to the Ministry of Labour, Invalids and Society, 84% of workers in small and medium construction companies are farmers (Bui 2012; Pham 2014). In order to address the shortage of skilled labour, employee training is considered to be essential for construction companies (Bui 2012). Yet the capacity and disposition of the sector to meet this objective is uncertain. Very few studies have been undertaken to explore current training practices in construction companies in Vietnam.

The second problem concerns the complexity that is framed by the needs of the emerging economy in Vietnam and the shift from a centralised economy to a more market-driven model. This has meant that organisations in construction are diverse. They consist of different sized companies, from extremely small to large, as well as a range of different ownership types. These include state-owned companies, private companies, joint-stock companies and FDI companies, all with different approaches to training in addition to differences in the attitudes of managers to employee training (Truong & Le 2007).

In addition, the available research suggests that the attitudes of managers play a key role in determining an organisation's approach to training (Finegold & Soskice 1988; Karpin 1995). Moreover, the research also suggests that company size and ownership profile impacts training provision (Jones, JT 2005; Truong & Le 2007). A key focus for this thesis is to understand and assess not only the impact of these factors but also the nature of the relationships between these factors.

#### **1.3 Research questions**

The assessment of existing research scholarship, which is discussed in detail in the following chapter, suggests that training is a complex process, conceptualised from a range of perspectives, with many drivers. Moreover, the relationship between training types, company size, company ownership and the attitudes of managers towards training have not been explored widely through empirical research, especially in the context of the construction industry in Vietnam. Therefore, this research addresses the following key questions:

- 1. What are the employee training practices currently used in construction companies in Vietnam?
- 2. What is the relationship between company size and employee training types in construction companies in Vietnam?
- 3. What is the relationship between company ownership and employee training types in construction companies in Vietnam?
- 4. What is the relationship between company size and the attitudes of managers towards employee training in construction companies in Vietnam?

5. What is the relationship between company ownership and the attitudes of managers towards employee training in construction companies in Vietnam?

Detailed hypothesis, informed by the research questions, were developed to assess the relationships posed by these research questions. These are presented in Chapter 2.

#### **1.4 Contribution of the thesis**

This thesis addresses current gaps in the understanding of employee training practices in the context of the Vietnamese construction industry, noting that Vietnam is an emerging developing country in South-east Asia and that the construction industry is influential to the development of the Vietnamese economy. The findings address gaps in the research literature about training practices in the Vietnamese construction industry and provide baseline data for other developing countries.

Firstly, the thesis created a new data set about the dimensions of training practices in the Vietnamese construction industry. The data affirms the role of training in developing skilled labour and indicates that training fulfills this function of developing human capital for different sized companies and companies with different ownership structures. Training is deployed by companies to meet labour and skill shortages, although companies also reported limited training infrastructure.

Secondly, the thesis findings facilitate a more nuanced understanding of key premises in the research scholarship about training. These premises which are largely drawn from the international research suggest particular patterns of training provision, namely that larger companies will be more likely to provide training than smaller companies and that larger companies will be more likely to provide formal, off-the-job training.

That these patterns are not entrenched in the Vietnamese construction industry identifies the benefits of industry-based research and also suggests that the construction industry is an industry in transition. This reflects the transition of the Vietnamese economy more generally from a centralised, controlled economy to a market economy, noting that this transition is unlikely to be uniform and that companies will move to

adopt human resource development (HRD) practices at different rates. In the context of a transitioning Vietnamese economy and increased levels of foreign investment, the thesis makes a key contribution in understanding the pattern of training provision by company ownership type and examining in particular the impact of foreign capital in shaping training provision in Vietnam.

Thirdly, the findings indicate that managers in construction companies have positive attitudes towards training and the utility of training for a series of strategic purposes. These attitudes were evident despite the absence of a sophisticated training infrastructure. Company size was not a significant differentiating factor and ownership was a greater predictor of the strength of positive company attitudes. Broadly, the findings affirm the positive attitudes of managers in construction companies in Vietnam towards providing employee training, choosing appropriate training approaches and sound decision-making regarding training policies for their particular circumstances and environment. Despite the positive attitudes towards training, skill shortages remain. These shortages identify key areas of policy and practice focus for the Vietnamese government and Vietnamese construction companies.

The thesis results contribute to the development of the recommendations relevant to policymakers in supporting or developing successful training policies or developing human resource functions for the range of construction companies in Vietnam.

#### **1.5 Organisation of the thesis**

The thesis is divided into six chapters. This chapter has introduced the thesis and has given particular attention to the context in which the thesis is set, namely the Vietnamese construction industry. It has profiled the skilled labour shortage faced by the Vietnamese construction industry, a shortage that poses particular questions for investment by employers in training as a means of addressing the industry's skill shortage. Chapter 2 introduces and dissects the research scholarship relevant to the provision of training. The chapter assesses theoretical explanations for the drivers of training and also assesses factors that may impact and moderate training provision, such as the attitudes of managers towards training, company ownership and company size. This review prefaces

the conceptual research model and hypotheses integral to this current thesis. The literature review is followed in Chapter 3 by the methodology relied upon in this thesis, including the rationale for the quantitative methodology and methods critical to the research design. This chapter outlines the target population, sampling technique, survey questionnaire design and also the data analysis utilised to meet the objectives of the current thesis. Chapter 4 presents the results which were processed by SPSS software as well as providing various test results for confirmation of hypotheses. The results are followed by a discussion of the results and findings in Chapter 5, results and findings which are set against the research questions and hypotheses established for this thesis. Finally, the concluding chapter of the thesis provides commentary on the implications of the thesis results for research scholarship about training and identifies a series of recommendations including those concerning further research.

### **CHAPTER 2: LITERATURE REVIEW**

#### **2.1 Introduction**

In recent years, employee training has been recognised by scholars, policymakers and business as one measure to address the shortage of skilled labour in the market. Scholarly investigation into employee training includes research addressing the range of enabling and adverse influences on employee training, and also the form of employee training undertaken. This diversity is influenced by a theoretical framing of the field which, in the absence of a unified theory of training (Smith, Andrew 1998), draws on a range of theories within the human resource management and development fields of study.

Given this theoretical ambiguity and resultant diversity, the focus of this literature review is linked to the research problems identified for this thesis, namely current organisational practice around employee training and the factors shaping the provision of employee training. Thus this review examines key research findings as they concern the attitudes of managers towards training, the impact of company size and ownership on employee training, in addition to the form of training undertaken. Within each of these areas there are diverse research findings that bear further examination in the context of this thesis.

Illustrating this diversity, the relevant research exploring attitudes at the management level of companies towards employee training will be examined. Until now, there has been a limited examination of the relationship between the attitudes of managers and employee training in Vietnam. This absence of a well-established research scholarship was considered by Goodwin, O'Connor and Quinn (2014), one of the few studies that considered the perspectives of employers towards employee training in Vietnam. Following the examination of the methods utilised by Vietnamese employers to address shortages of skilled workers, the authors concluded that 'relatively little is still known about work, employment and training in Vietnam and there are few opportunities to undertake research of this nature' (Goodwin, O'Connor & Quinn 2014, p. 35). Finally,

Goodwin, O'Connor and Quinn (2014) provided an interesting proposition for this thesis through their affirmation that 'Vietnamese employers clearly value training and appreciate the impact that training young people can have for their enterprises' (Goodwin, O'Connor & Quinn 2014, p. 45). Moreover, the role of employers or management level staff as being critical agents in the provision of employee training is confirmed also by scholars in the broader international literature which suggests that management staff play a key role in making decisions to provide employee training (Coetzer, Redmond & Sharafizad 2012; Guerci et al. 2015; Khandu 2014).

Similarly, the literature examining the relationships between company ownership and employee training provision is diverse and contested. Company ownership in this thesis distinguishes between FDI companies, joint-stock companies, state-owned companies and locally owned companies. Although several studies confirm that ownership is one of the key factors impacting employer decision-making on employee training, findings still remain inconsistent making it difficult to draw conclusions about these relationships (Huang & Renyong 2014; Jones, JT 2005). For example, Truong and Le's (2007) study suggests employers of companies with different ownership types in Vietnam have different perspectives towards employee training (Truong & Le 2007). However, other scholars like Macpherson and Jayawarna (2007) suggest that there is no significant correlation between company training provision and business ownership (Macpherson & Jayawarna 2007).

Finally, on the indicator of company size, the available research indicates that there are significant relationships between company size, training volume and the diversity of training (Cappelli & Rogovsky 1994; Huang & Renyong 2014; Osterman 1995). Equally there are arguments that company size is not a determinant of training (Smith, A. & Hayton 1999) and company size was not positively associated with training practices (Smith, Andy 2003). In considering company size, industry sector may well provide an important contextual effect. Truong and Nguyen (2011) assert that training has a significant effect on the productivity of manufacturing companies, but exercises a non-significant impact non-manufacturing companies. However, they suggest further research on a larger scale in a certain industry to assess whether there are positive

relationships of employee training approaches and performance of companies in a certain industry (Truong & Nguyen 2011).

As this thesis focuses on employee training provision in construction companies in Vietnam where there is a dearth of data, comparative literature in the Vietnamese context which examines employee training provision in other industry sectors will also be considered for its potential value to inform this review. Therefore, this thesis addresses the gap in empirical research as suggested by Truong and Nguyen (2011), who call for further research to elucidate the relationships between employee training provision and companies in the construction industry context in Vietnam (Truong & Nguyen 2011).

This introduction suggests that there are multiple drivers that shape employee training practices and also complexities in the existing research findings that warrant further discussion in order to inform the relatively small literature and research base on employee training in Vietnam (Goodwin, O'Connor & Quinn 2014). These complexities are discussed further in the sections that follow with a view to framing the research questions and framework for this thesis.

# 2.2 Rationales for employee training-performance, productivity and competitive advantage

The literature on employee training has developed significantly over the last decades and contains many specialised areas of focus. However, in seeking to understand the influences and relationships shaping employee training in the construction industry in Vietnam, it is useful to consider briefly the wider literature that deals with the rationale for employee training, including literature which reflects developing understandings of the perceived role and importance of employee training. Broadly speaking, the literature reveals a focus on employee training as a vehicle for building skills, increasing productivity of both the individual and the organisation and thereby providing a means of achieving competitive advantage.

The question of how employee training leads to improved performance is dealt with in a number of ways in the literature. For example, Kooij, Jansen, Dikkers, & De

Lange(2010) suggested that training creates a strong bond between employees and companies which then leads to improved job performance of employees and positive outcomes for companies. However, this study is not strongly indicative of the literature which typically focuses on the notion of human capital and its perceived links to performance. Bulut and Culha (2010) make such links between increased human capital through training and improved performance of employees in their work. Similarly, Kennett (2013) defines training as a key approach for investment in human capital which improves productivity of a company by improving the knowledge, skills and abilities of its employees. Alipour, Salehi and Shahnavaz (2009) also affirm that training is for developing human capital and important for maintenance of skilled workforces and enhanced effectiveness of companies. On this reasoning, training improves employee performance because it leads to enriched knowledge, ability and attitudes of employees (Alipour, Salehi & Shahnavaz 2009; Khan 2012; Munoz Castellanos & Salinero Martín 2011; Porter 1980). Moreover, Khan (2012) emphasised the important role of training in increasing employee performance in comparison with other factors such as working environment and management behavior (Khan 2012).

In the above examples, the influence of human capital theory on shaping ideas which influence current employee training practices is clear. Becker (1993), the theorist most closely associated with human capital theory, stated that a company's most valuable asset is human capital, and the most effective companies are those companies that manage their human capital well (Becker 1993); this sentiment clearly still shapes many understandings of the field. Specifically as to the enriching potential provided by training, human capital theory identified that human capital resources consist of ability, qualification and skills that can be acquired through general or specific training approaches. This foundation was outlined in Chapter 1 and is addressed in further detail in this chapter. This discussion highlights the contestation in the literature regarding the productivity benefits of particular types of training. To reiterate, general training is for enriching knowledge and/or capabilities that an employee can apply for their current jobs and other possible roles within the company. However, general training also increases an employee's possible productivity not only for the company providing the employee training, but potentially also for other companies as the skills acquired are

general and transferable (Thang, NN, Quang & Buyens 2010).Specific training is more narrowly focused on an individual company's particular and contemporary needs and is therefore less portable and thought to be mainly exploited for increasing productivity of the specific company. Following the logic of this formulation, it has been argued that business organisations may be less interested in providing general training in comparison with specific training for their employees (Thang, NN, Quang & Buyens 2010).

The link between performance and productivity is also regularly asserted in the employee training literature. In the early 1990s, Holzer, Block, Cheatham & Knott (1993) found a positive correlation between changes in training provision for employees and productivity (Holzer et al. 1993). In addition, Bartel (1994) provided evidence in the manufacturing sector that formal training provision positively impacted employees' productivity (Bartel 1994). Moreover, according to Delaney and Huselid (1996), training is for improvement of company performance (Delaney & Huselid 1996) also affirm that companies investing in human capital or increasing in the provision of professional training leads to improvement for both individual employees and companies.

One of the key rationales for this link is provided by a variety of literature that affirms training enhances employee performance because it enriches knowledge, improves abilities and changes employee attitudes (Khan 2012; Munoz Castellanos & Salinero Martín 2011; Porter 1980). Nadeem (2010) confirmed that the successful and prosperous future of a company is dependent on its resources, which include skills, knowledge and experience of the workforce. Training is presented as crucial for enriching these resources by providing chances for employees to build competent performance, hence increasing company productivity (Nadeem 2010). Recently, Armstrong and Taylor (2014) also made the link between training and competent performance, defining training as a tool for planned and systematic modification of employee behaviours through learning from instruction, events and training programs. They stated that through training, employees are able to achieve essential knowledge, skills and competence to carry out their work more effectively (Armstrong & Taylor 2014). More recently, Long, Kowang, Chin & Hee (2016, p. 475) concluded that an 'increase in

training activities can help organisations to perform better and improve firm's future value' (Long et al. 2016, p. 475).

In one of the few examples of available literature on employee training specific to the construction industry, Udhayakumar and Karthikeyan (2014) concluded that training is considered to be a continuous learning process that brings changes in individuals. According to their findings, training improves the ability of individuals to perform a particular job, enhancing skills, attitudes and knowledge for all level of professionals in the construction industry. These skills are thought to enrich employee effectiveness in handling projects (Udhayakumar & Karthikeyan 2014). Moreover, Hwang, Jang, Park and Choi (2014) found that there is an increasing demand in abilities or skills for construction industry professionals to perform jobs well. Those include the eight key skills which would be commonly identified as general skills although this classification would be impacted also by context and the quality of the training environment.: 'selfmanagement ability, job understanding ability, human relationship ability, technology application ability, problem solving ability, communication ability, organisation understanding ability, foreign language ability'. These basic skills are seen as necessary for successfully completing jobs regardless of the type of job (Hwang et al. 2014, p. 1066).

However, it is important to note that not all research into employee training and its impacts on performance and productivity are unequivocal about its impacts or in agreement about the forces that lead to decisions to offer training. According to Esteban-Lloret, Aragón-Sánchez and Carrasco-Hernández (2014), many studies have been conducted to check the relationship between employee training and its effectiveness at the company level by using either objective measures or subjective measures. The purpose of such studies is to confirm that there are positive impacts of training on company outcomes; however the results are not always confirmed. Therefore, they conducted an empirical study in Spain with 374 companies. The study made use of the principles of institutional theory to explore the reasons behind the decision to provide training for managers and non-managers; the inclusion of institutional theory was to extend the theoretical framework beyond human capital

theory and resource-based view approaches within human resource management. According to institutional theory, it is necessary to consider coercive, normative, or mimetic forces on organisations in order to analyse their actions. The coercive pressures are evident when powerful organizations force organisations with less power to act in compliance to certain actions and behaviors to receive legitimacy, and its subsequent benefits. 'Coercive isomorphism results from pressure on organizations by other organizations upon which they are dependent and by cultural expectations in society' (Boselie et al. 2009, p. 494). The effects of mimetic pressures can be seen in the case of organisations that are faced with the situations where the perceived correct course of action is unclear. In such situations they may mimic the action of organisations they deem as being legitimate. 'Organizational leaders may decide that the best response is to mimic a peer that they perceive to be successful' (Mizruchi & Fein 1999, p. 657). The normative pressures are present as consequence of professionalism within certain organization fields. 'Organizational change is normative and stems primarily from professionalization' (Paul & Powell 1983, p. 152).

The Spanish study found that there are influential factors from institutional pressures, such as the provision of training because of coercive, normative, or mimetic forces (Esteban-Lloret, Aragón-Sánchez & Carrasco-Hernández 2014). The Spanish companies decide to train their employees firstly 'to obtain social legitimacy' and secondly 'to improve their performance'. The study found that 'institutional pressures (normative and mimetic) influence the decision to train' (Esteban-Lloret, Aragón-Sánchez & Carrasco-Hernández 2014, p. 253). Consequently, their study results supported the proposition that the drivers of employee training are drawn from institutional forces, particularly normative and mimetic forces. Moreover, training also contributed to improvement of company performance (Esteban-Lloret, Aragón-Sánchez & Carrasco-Hernández 2014).

Competitive advantage through training is another key theme that emerges in the literature. In terms of competitive advantage, Porter (1980) provides two basic types of competitive advantages: differentiation and cost leadership (Porter 1980). Recently, according to Munoz and Salinero (2011), training is the main resource for competitive advantage for companies in Spain. The results confirm the authors' thesis that training is

a source of competitiveness and, moreover, it noted that companies pursuing a strategy of differentiation provide employee training more than companies with a cost leadership strategy. Companies following the strategies of cost leadership consider budgeting more strictly for training provision in the development of human resources of those companies (Munoz Castellanos & Salinero Martín 2011).

For some scholars in this strand of the literature, 'organisational training should be considered as an antecedent to enhance employees' commitment to their organisation in order to use organisational training as a motivator of organisational commitment' and sustainable competitiveness (Bulut & Culha 2010, p. 319). In addition, Burden and Proctor (2000) asserted that 'meeting customer needs on time, every time, is a route to achieving and sustaining competitive advantage, and training is a tool that organisations should use to succeed at this' (Burden & Proctor 2000, p. 90). One aspect of the sustainability of competitive advantage hinges on the ability for training to increase employee retention. It means that training is seen as a key approach to attract and retain the best people. Training increases satisfaction and commitment of employees to their jobs and their companies. In other words, it could be said that training has intangible benefits for both companies and employees for the long run. Therefore, companies are encouraged to invest in employee training for development of the company's long-term sustainable workforce (Sanjeev, Singh & Singh 2014). The research which links training to the wider questions of a sustainable workforce clearly draws many influences from the field of human resource management (HRM). According to Shammot (2014), HRM interventions, such as training, play a very important role in increasing competitiveness of business organisations and play an essential role in improving skills and enriching knowledge of employees in a range of technical, management and specific job skills (Shammot 2014).

An influential theory within HRM which frames understandings about training is Barney's (1991) resource-based view (RBV). The RBV affirms that companies can gain sustained competitive advantage by creating resources that are rare and impossible for a competitor to imitate (Barney 1991). In explaining the relationship between training provision and competitive advantages of companies, RBV approaches assert that companies comprise a bundle of resources of which, human capital is one of the most valuable. Human capital is maintained as an internal labour market that creates barriers of imitation, prevention of duplication from competitors. Therefore through training, companies could create special resources that are not easy to imitate by competitors in order to provide greater utility for customers in comparison with their competitors (Augustine A. Lado & Wilson 1994; Barney 1991; Fahy 2000; Papalexandris & Nikandrou 2000; Porter 2008; Shleifer & Vishny 1997; Sirmon, Hitt & Ireland 2007; Wright, McMahan & McWilliams 1994).

The continued currency of this theorisation can be seen in a recent study by Sum and Chorlian (2013) which draws on RBV theory, and argues that employee training was seen to positively impact on the performance and competitiveness of companies (Sum & Chorlian 2013). Mamaqi (2014) also used RBV to construct hypothetical relationships between training and business performance. Her study affirmed that it is essential to improve employee knowledge and skills for doing business today. Moreover, the author confirms that training is for new skills as well as for achieving competitive advantages and business performance. In other words, employee knowledge enhances the companies' abilities to remain sustainable and achieve competitive advantage (Mamaqi 2014).

# 2.3 Moderators of employee training – infrastructure, funding and access to skilled labour

Research on employee training also examines a series of contextual shapers or moderators of training. In broad terms these include factors that are also addressed in institutional accounts of employee training but specifically include infrastructure and access to funding and skilled labour. There is a relationship here to the questions and issues that have been considered thus far in this chapter. Although the premise that training is beneficial to company performance and competitive advantage is a nuanced and contested one, its emergence in the series of research discourses has prefaced an examination of the available infrastructure and funding for support of training. The imperative for this examination may also arise from a demand for and shortages in skilled labour.

Early and influential work in this area by Hayton, McIntyre, Sweet, McDonald, Noble, Smith and Roberts (1996) suggested that the existence of training infrastructure within an enterprise was one of the mediating factors impacting on the provision of training (Hayton et al. 1996). Specifically, this research used the following factors as indications of a training infrastructure - a human resource officer, a training manager, a specialist training section, worksite trainers/instructors and specialist training facilities (Ridoutt, Dutneall, Hummel and Selby Smith 2002, p.17). Using these indicators, it was found that '[I]arge worksites (>100 employees) are twice as likely to have some form of infrastructure than small enterprises (<20 employers)' (Ridoutt et al. 2002, p. 51).

The implications of these findings are relevant to the interests of this thesis in that it is widely held that '[s]maller-sized enterprises are argued to have a number of disadvantages as training organisations when compared with larger enterprises. ...They are rarely likely to have a dedicated person or position looking after training (or even human resources more generally), and so might lack a champion for the training cause' (Ridoutt et al. 2002, p. 17). This will necessarily impact the likelihood of training occurring. Furthermore, as well as lacking the resources to create internal infrastructure for training, small enterprises also lack knowledge of external supports such as state-provided training and the means by which they might access funding (Ridoutt et al. 2002, p. 17).

In exploring empirical research relevant to the national context of this thesis, it can be seen that there is a small but emerging body of research in the Vietnamese context on moderators of training. Given the various ownership forms and company size characteristics being considered in this thesis and the likely impacts on infrastructure of these characteristics, it is important to examine the existing research. This research focuses on sectors other than construction, however some of the findings may have relevance for analysis of the findings of this thesis.

The most well developed findings in this context relate to the possible impacts of company ownership types on training and development infrastructure. Research on HR

in global contexts and multi-national companies (MNCs), there are significant findings on the transfer of HR practices, including the creation of training infrastructure, across borders (Cox & Warner 2013).

When examining training and development approaches of FDIs in Vietnam, Cox and Warner (2013. p.5) found 'country of origin effects'. This means that we might expect organisational structures evident in home country to be evident in the host country. However, Cox and Warner's (2013) work on Japanese and US MNCs in Vietnam showed that the effects were dependent on the sector as much as home country influence on the types of infrastructure put in place, thereby opening the way for further sector specific research to be done (Cox & Warner 2013).

Research suggests that on the measure of expenditure per employee, MNCs invest more into training initiatives than either SMEs or SOEs (Friedman 2004, Thang and Quang 2007). According to Thang and Quang (2007), foreign investors understand lack of skills and qualifications in the labour-market and make training a priority. Gieb (1999) conducted twenty structured interviews of Vietnamese managers of US subsidiaries in Vietnam and found that staff training was used as a key strategic management tool. Joint ventures and foreign-owned corporations offer training facilities and highly skilled expatriates to help (Cox & Warner 2013; Thang, NN, Buyens & Leuven 2008; Thang, NN & Quang 2007).

Provision of training and development can be seen to be moderated by employers' access to skilled labour. Recent research of relevance to this thesis shows the impact of the tight labour market on the provision of training opportunities in Vietnam is complex. For example, Cox and Warner's (2013) work showed that in a tight labour market, training is more likely to be offered as part of a retention strategy, especially for skilled workers and managers. As the study revealed, 'competition for high-quality staff is fierce and poaching is popular in a tight labour-market' (Cox & Warner 2013, p. 24). However, further research also suggests that this may result in a paradoxical impact on decisions to offer training and development. As Cox (2014) outlines, 'companies are faced with a dilemma – they could spend a fortune training and developing their management staff, only to see them leave the company (newly equipped with skills that

make them highly desirable in the marketplace) for higher paying employers' (Cox 2014, p. 181). This effect could be argued to be a moderating factor in relation to decision-making on resource allocation to training.

#### 2.4 Training types

One of the points of focus in this thesis concerns employee training practices currently being used in the construction industry in Vietnam. In order to interpret and analyse the data it will be necessary to map the findings against an understanding of the range of options available and more specifically to consider the drivers of any apparent trends in the construction industry in Vietnam. To illuminate this area of interest, it is necessary to explore another useful strand of the literature which has worked to establish typologies of training as a means of classifying and differentiating between training types as well as understanding decision-making concerning their use. One of the broadest and most encompassing differentiators found in the existing body of research is that of on-the-job training and these categories will be employed in this thesis. The use of these terms in research was outlined in Chapter 1 and is reiterated here for reasons of clarity.

On-the-job training is broadly defined as 'the planned process of having experienced employees train novice employees on units of work in the actual work setting' (Jacobs, Ronald L & Jaseem Bu-Rahmah 2012, p. 76). In training situations characterised by these conditions, informal methods of instruction are commonly used and some studies suggest that responsiveness to the needs of the job takes precedence over planning (Cross & Fitzpatrick 2015). On-the-job training methods can consist of assigning trainees as members of task forces, job rotation and apprenticeships (Jones, WM & Dexter 2014; Tung 2001). In contrast, off-the-job training is defined broadly in the literature as the provision of 'opportunities on a variety of topics at a site other than where the work actually done' (Jacobs, R L 2003, p. 13). Off-the-job training methods can include lectures, group discussions, case studies, video tapes, simulations, courses at colleges or universities, vocational courses and overseas workshops. In the limited available research on how these choices play out in the construction industry, there is some evidence to suggest that a wide range of both on and off-the-job training methods

are apparent. For example, Odusami, Oyediran and Oseni's (2007) work on training in the construction industry suggests that a range of training methods are applied. Their research found that off-the-job training methods including lectures, case studies, classroom training, conferences, films, tapes, videos, group discussions and field visits were regularly deployed. Their findings also revealed that 'site managers gave priority to field visit, followed by films, tapes and video; and then lecture in that order' (Odusami, Oyediran & Oseni 2007, p. 78) while 'contractor's employees preferred on-the-job training' (Odusami, Oyediran & Oseni 2007, p. 79).

Existing research suggests that a range of factors impact employer decision-making in relation to which training type is used. For on-the-job training, employers are driven by a number of incentives which include 'the favourable relationship between training costs and benefits, the possibility to train just-in-time; and the expectation of a positive transfer of what was learned to the employee's own work situation' (Van der Klink & Streumer 2002, p. 196). For off-the-job training, Smith (2002) suggests the decision is informed by the need for training which takes a more explanatory approach, allowing for more detailed and deliberate delivery. This choice is also seen to be an option when time pressure is not a factor and there is a perceived need to provide training broader in scope than that available through on-the-job training (Smith 2002).

Of particular interest to this thesis is the nature of the relationship between choice of on or off-the-job training and company size and ownership type. These questions are dealt with later in this chapter as too the attitudes of managers towards training choices.

# 2.5 The attitudes of managers towards employee training – strategy, investment and context

A key goal of this thesis is to explore factors which shape the provision of employee training and to this end, the attitudes of managers towards training are the focus of two research questions. A range of literature shows that the attitudes of managers are considered as a key determinant of decision-making regarding employee training in companies (Coetzer, Redmond & Sharafizad 2012; Khandu 2014). The central role played by managers has thus been the focus of a body of research which has explored the impact of the attitudes of managers in shaping the decision to provide or deny

opportunities for training to upgrade skills of employees to meet company requirements (Martin et al. 2014). In the discussion below, it will be seen that the research on the attitudes of managers to training reveals that decision-making around training is linked to questions of strategy, i.e. whether training is seen as an investment or a cost as well as contextual factors shaping attitudes.

# 2.5.1 Training and management strategy – high or low skills?

The research suggests that there are some significant factors which stand out in relation to the attitudes of managers to the provision of training, some of which indicate that the decision-making process is fraught with complexity and competing interests. For example, the question of whether management has decided to take a high - or low-skills route to the development of their workforce is considered to be a determining factor. This differentiation most commonly contrasts employers who engage in significant investment in training their workforce for higher skills with those who adopt a low investment in skills strategy, although more recent research identifies the limitations in binary distinctions (Hall & Lansbury 2006).

Therefore, in making decisions, managers may face risks of disruption of the work process by employees if they create a highly skilled workforce because of the increasing bargaining power of those skilled employees. However managers also recognise that companies with sufficient skilled labour can gain greater efficiency and achieve more competitive advantage through the utilisation of skilled human resources (Aguinis & Kraiger 2009). The alternative, that is, to choose the low skill strategy, comes at a cost as well.

Another key factor relates to managers' overall strategic view of training. In terms of training provision, managers often consider whether their training strategy is part of a short-term or long-term strategy. They recognise that training is often for the long term, similar to research and development expenditure. Companies can only realise the full return on employee training investment through productivity after the trained employees acquire skills in a new area of expertise. However, managers often seek to maximise

quarterly profits, while employee training provision means increasing expenditure without increasing profitability in the short term. As a result, in practice, managers may cut training expenditure in order to pursue short-term profitability. Notwithstanding, company managers have to support employee training provision to get highly skilled workforces for long-run strategic perspectives, so that 'training is part of the strategic vision of the company and if properly developed it has a positive impact on results.'(Mamaqi 2015, p. 3).

## 2.5.2 Training as management investment or management risk

In touching upon the question of management expectations around training leading to profitability, it is necessary to also consider expectations around return on investment as a shaper of the attitudes of managers towards training, as well as fears concerning the risks involved in providing training which might increase employee mobility.

In terms of employee training provision and employee turnover, Kennett (2013) provides an interesting assessment of employers who support and those who do not support employee training provision. There are employers willing to invest in employee training for retaining employees and enhancing their company's capability. However, there are also employers who are reluctant to provide employee training because they assume that their employees may leave their companies as a result of improving their skills (Kennett 2013). In addition, Gospel and Lewis (2010) conducted a study in the United Kingdom and found that a major fear of employers is that training costs may be lost because their trained employees may be poached by other companies (Gospel & Lewis 2011). Arguing along the same lines, Cox and Warner (2013), found that companies in Vietnam are also 'faced with a dilemma' that staff newly equipped with skills leave their companies for higher paying employers (Cox & Warner 2013, p. 185). Thus, that 'situation might discourage firms from investing in developing local staff' (Vo & Hannif 2012, p. 80). By contrast, Forrier and Sels (2003) found that organisations with high employee turnover were more likely to organise more training in order to secure employee commitment to the organization (Forrier & Sels 2003).

The rationale for employer support of training is developed further in Kennett's (2013) analysis. Employers decide to support employee training from the belief that the provision of employee training improves working skills and capacity of employees of companies. Employers also believe that training provision produces economic benefits for both individual employees and companies. For example the evidence in Kennett's study shows that employer-provided training impacts employee turnover. It contributes to decreased turnover of employees and increased work performance in situations where training is offered as a team-based development initiative alongside other high performance work practices. However in circumstances where there was little access to growth opportunities in a company and when skills gained through general training attracted higher wages with competitors, training increased employee turnover. The results suggested that employees often weigh up possible benefits and losses before making a decision on staying or leaving their companies (Kennett 2013).

Employer consideration of the costs of training is also assessed in the available research. According to Bhattacharya, Doty and Garavan (2014), many employers consider offering employee training for developing human capital as a cost rather than as an investment. Therefore, they often compare investment in human resource development with physical investments or other strategic assets (Bhattacharya, Harold Doty & Garavan 2014).

# 2.5.3 Contextual shapers of the attitudes of managers

The literature examining the relation between attitudes of managers towards training and training provision also accounts for environmental context. Researchers including Antonioli and Della Torre (2015) and Truong and Le (2007) affirm that attitudes of managers in companies towards employee training provision are affected by both size and ownership of companies. State-owned companies are subsidised by government and as such set a higher priority on employee training provision than joint-stock companies. Moreover, decisions on providing training for employees are also affected by company size or economic scale of the company (Antonioli & Della Torre 2015; Truong & Le

2007). These issues form the basis of further research questions guiding this thesis and will be discussed in detail below.

However, one of the most significant contextual shapers of the attitudes of managers to training is the economic context in which the company operates. This bears particular scrutiny in the case of this thesis where Vietnam's political and economic history continues to have a significant impact on the context in which the construction industry operates. It is easy to recognise that Vietnam has a long history of many wars. Since the reunification on 30 April 1975, the economic system has changed consistently with the country's development, from a centrally planned economy to 'a socialist-oriented market economy' (Nguyen, TD 2012, p. 1) characterised by multiple ownership types but where the state-owned form retains the leading role in the economy (Nguyen 2013, p. 1).

Furthermore, human resources development and the attitudes of managers in Vietnam are also diverse among state-owned companies, local private companies, joint-stock companies and FDI companies. According to Le and Truong (2005), there were different attitudes of management staff towards employee training provision depending on different company ownership types. Based on their findings these authors argued that HRM practices reflect the ownership characteristics of companies. For example, foreign-owned companies tend to provide more human resource development or employee training provision in comparison with state-owned companies, which in turn provide more employee training than local private companies (Le, CT & Truong 2005).

Taken together these findings suggest that managers in FDI companies have different attitudes towards employee training, compared to state-owned and local private companies. An influential factor may be the importation of human resource management practices by FDI companies into Vietnam. There is evidence that these practices are more likely to place a positive value on employee training. Within this logic, training is considered one of the most important tools for motivation of employees and expenditures for training are considered as an investment (Le, CT & Truong 2005).

In summary, scholars researching in international settings as well as those undertaking research in Vietnam, support the notion that complex factors impinge upon management

decision-making in relation to employee training (Coff & Raffiee 2015; Kennett 2013). However, what does seem clear from the literature is that this decision-making process hinges upon the attitudes of managers towards training. The discussion above examines the research looking at the attitudes of managers towards employee training provision in some detail. The organisation of the discussion was designed to reflect key themes in the literature on the attitudes of managers, which in turn form the basis of the major survey tool used in this project.

## 2.6 Relationships between company ownership, company size and training provision

In order to explore the reasons why companies provide training for employees, this thesis will examine the impacts of company ownership and company size on provision of training. Therefore, it will be important to understand the existing research focusing on organisational context. Within this consideration of context, company size and company ownership are seen in the literature as two key factors that scholars have explored in order to check the relationship between these two factors and employee training provision and training types.

# 2.6.1 Company ownership types

As established above, since 1986, Vietnam's economic system has changed from a centrally planned economy to a market economy with socialist characteristics. This has led to changes in the business ownership of companies. This has meant a change from an economy dominated by state-owned enterprises, subsidised by government, to an economy with more privatisation. This economy includes state-owned enterprises, joint-stock/'equitised' (partial privatisation) companies and local private companies (Chan & Norlund 1998; Zhu & Fahey 2000).

Moreover, in order to prepare for accession to the World Trade Organisation (WTO) in 2007, Vietnam reinforced its laws on business and investment in Vietnam. This included legislation that regulates investment in Vietnam and the Law on Enterprises which defined the forms of companies that were effective from 1 January 2006. These laws were designed to create a level playing field in business for companies, regardless of

local or foreign ownership. Currently, there are a variety of business forms in Vietnam. They include companies with the forms of limited liability company, joint stock company, partnership, business cooperation contract, build-operate-transfer, build-transfer-operate, build-transfer projects, public–private partnership projects, enterprises with one hundred per cent foreign-owned capital and joint venture companies (Mayer Brown 2014).

In terms of business ownership, Truong and Le (2007) divided the business forms in Vietnam into four main groups: (1) state-owned companies, (2) local private companies, (3) foreign-invested companies (abbreviated throughout this thesis to FDI Companies) and (4) joint-stock companies (Truong & Le 2007). This differentiation which is adopted in the research design of this thesis distinguishes ownership type on the following basis. State-owned companies are the companies with state-investment capital. Private companies are considered as those owned by a non-government organisation, the individual shares of which are not traded publicly. Foreign direct investment companies (FDI) includes companies with 100% foreign-owned capital and joint-venture companies. Finally, joint-stock companies are those owned by shareholders; this group of companies includes those that have been partially equitised.

These four company types in Vietnam will be utilised for this thesis.

# 2.6.2 Company ownership and employee training provision

The relationship between company ownership and employee training provision and choice of training types is of interest to scholars in this field. A range of studies support the idea that training provision and training types provided by companies are impacted by company ownership but the nature of the relationship remains unclear (Macpherson & Jayawarna 2007). A variety of studies provide evidence to show the impact of ownership on training provision. For instance, research in Asia relating to FDI companies that provide employee training shows that there is a significant positive correlation between company ownership and training provision (Shen & Darby 2006; Tan & Batra 1996; Zheng, C, Morrison & O'Neill 2006).

In Vietnam, Truong and Le (2007) found that training practices of companies were influenced by company ownership. This means different forms of company ownership result in different human resource management and development, as well as differences in the attitudes of managers towards employee training provision (Truong & Le 2007). Moreover, Truong and Le (2007) also confirmed that different ownership is linked to different management perspectives towards employee training. For example, managers in FDI companies have positive attitudes towards employee training provision. They considered it as an investment, or as a useful motivational tool. Moreover, they provide employees with various training activities. However, local private companies considered training as a task that is mainly the responsibility of government. State-owned enterprise managers especially thought that companies should minimise training costs because they consider training as a cost rather than an investment (Truong & Le 2007). In addition, Vo (2009) affirmed that 'SOE [state-owned enterprises] employees were not motivated to learn and develop skills and knowledge' (Vo 2009, p. 114). There were short training courses for 'enhancing productivity and improving organisational health and safety'. However, they mainly aimed 'to strengthen employees' political beliefs' and 'SOE managers therefore were not trained in business management, as the skills were deemed unnecessary'.

Although there are arguments as to the nature of the contribution different business ownership types might play in developing the economy of Vietnam (Nguyen, L 2015), a 'socialist-oriented market economy' (Nguyen 2012, p. 1) is still the core economic philosophy of Vietnam and state-owned companies remain in a dominant role in the construction industry (Hop 2014; TM 2014). A number of issues have been raised in the literature in relation to what this might mean for manager attitudes towards training and developing employees as a means of maximizing efficiency, performance and productivity. In particular, questions about the impact of government operational subsidies on manager motivation to achieve greater efficiency have been raised (Truong & Ha 1998) with some commentators exploring claims that there is a link between the provision of subsidies and ineffective management operations. For example, Shleifer and Vishny (1997) suggest that State owned companies are operated by politicians with bureaucratic attitudes. They argue that that while in principle, the mission of those companies is to work for the interests of people or for the public interest they tend to focus on exploiting public resources for their own interests only (Shleifer & Vishny 1997).

In Vietnam, the development of the economic system has been supported by regulatory changes supporting new forms of business ownership, other than state-owned enterprises. Since 1986, due to the program of 'doi moi' (reform) of Vietnam's economic system, the roles of private ownership have been partially recognised and developed alongside the existence of state-owned enterprises (Truong & Ha 1998).Since 1992, Vietnam has employed a program of privatisation. This means they conducted a program of gradually transforming the SOEs to become partially private companies through a process of equitisation. According to Amin and Webster (1998), the few initial examples of equitisation in the 1990s proved positive in terms of increasing efficiency (Amin & Webster 1998). However, in terms of human resource development, there were not many changes in management staff after equitisation (Sjöholm 2006).

According to Le (2015) and Zhu et al. (2008), Vietnam can be categorised as a transitional economy; as such, Vietnam's economy has seen a variety of changes such as changes to the predominant role of state-owned enterprises in a dynamic economy with an integration of public or state-owned companies and privately owned companies. This change has included the increased entry into the market of multinational companies with foreign investment capital. Consequently, there are many changes in human resource management practice (Le, TAN 2015; Zhu et al. 2008). Moreover, Le and Truong (2005) state that companies with greater private ownership tend to operate more efficiently than state-owned companies. The reasons for this, for equitised companies, is that they are operated under high pressure to utilise company resources more effectively for improved performance, while local private companies take responsibility for themselves and actively work towards improving their effectiveness (Thang, LC & Quang 2005).

In summary, the changing economic system in Vietnam has resulted in a greater diversity of company ownership types in Vietnam. The increased diversity in business forms in the economy has introduced a wider range of human resource management practices, appreciating that different ownership forms have different frames of reference. As a result of these trends, it may be expected that companies of different ownership types may favour different approaches to training for company development. These possibilities are explored below as well as in the findings of this thesis.

Shen and Darby (2006) conducted a study in China on training in Chinese multinational companies (MNCs). They used a semi-structured, interview-based survey for data collection from ten Chinese MNCs. The selected companies represent a variety of industries and ownership types. The study includes in-depth interviews with 30 general managers, human resource managers and executive managers. The respondents were asked about training provision by those companies. A positive relationship between training provision and FDI companies in China was found in this study(Shen & Darby 2006).

Moreover, Zheng, Hyland and Soosay's (2007) examination of multinational companies (MNCs) in six Asian countries – Malaysia, Indonesia, the Philippines, Singapore, Thailand and Taiwan – indicates a positive correlation between companies with foreign ownership and employee training provision. They also found that many Asian companies achieved attraction and retention of talent by providing quality employee training. Consequently, the authors suggested that when starting up in Asia, MNCs should recognise the important role of local employees and their employee training needs in their global training strategy. This is seen as especially important for a company with a differentiation strategy as it requires an emphasis on the quality of employees, resulting in the need for the company to offer a variety of appropriate training programs for employees. As a result, those MNCs may be better able to compete with local companies (Zheng, Connie, Hyland & Soosay 2007).

Zheng, Hyland and Soosay (2007) also found a high rate of employee training in MNCs because those companies place a high premium on training for purposes of increasing those companies' international trade (Zheng, Connie, Hyland & Soosay 2007). Another rationale for those companies that increasingly provide employee training is that it is

used to assist MNCs to meet higher demand from foreign markets. At the same time, by providing employee training, MNCs can represent themselves as having specialised human capital strong enough to effectively compete with local businesses (Dowling, Festing & Engle Sr 2008). These findings are relevant also in the context of the previous broader discussion on the role of training to increase competitive advantage.

Export companies may present a particular set of circumstances that exist to justify expenditure on training provision. Companies may justify the extent of employee training provision because their goods and services must meet international standards for engagement in the global market (Dowling, Festing & Engle Sr 2008; Zheng, Connie, Hyland & Soosay 2007). According to Weinstein and Obloj (2002), companies that gained experience in the market economy tended to support providing employee training more than companies in the command, or centrally planned, economy (Weinstein & Obloj 2002).

In summary, the available research indicates that there are a variety of studies showing a relationship between employee training provision and company ownership. However, there are still relatively few empirical studies about the relationship between company ownership and training provision for employees in the context of the construction industry in Vietnam. Therefore, this thesis focuses on addressing the limitations in the research base and providing empirical evidence on the relationship between employee training provision and company ownership in the Vietnamese context.

# 2.6.3 Company size training provision and training types

Within the research on employee training there has been interest in assessing the relationship between company size and employee training provision. Broadly, although by no means exclusively, the research indicates a positive relationship between employee training provision and company size. In direct terms, the research suggests that larger companies provide more training for employees than smaller companies (Lee 2012). Smith & Hayton (1999) conducted research based on a two-year study of training in Australian private companies. Based on quantitative and qualitative data, the study results defined a range of factors that impact training provision for employees of

companies in Australia. They especially confirmed that company size is only one of the key factors that influence decision-making on providing employee training by companies (Smith, A. & Hayton 1999).

In addition, company size is strongly associated with the volume of training provision and diversity of training types. There are several rationales for the impact of company size on employee training provision. Firstly, in terms of resources, larger companies have greater economies of scale so they have more advantages in providing internal resources for a high investment in training employees. Secondly, based on the nature of the workforce, larger companies need more skilled labour resources and professional employees who need to be trained to address company requirements. These factors contribute to the demand for employee training in larger companies being greater than that evident for smaller companies (Smith, A. & Hayton 1999).

The earlier findings by Smith and Hayton (1999) are confirmed in more recent research by Waddoups (2011). This research examined the relationship between company size and formal, off-the-job training in Australian private companies. Waddoups (2011) found that there is a positive relationship between company size and training provision by those companies, concluding that larger companies provide more off-the-job employee training than smaller companies (Waddoups 2011). More recently, Bhattacharya, Doty and Garavan (2014) reviewed the research examining the relationship of employee training to company size. They confirm that there is a positive relationship between company size and employee training. Moreover, smaller companies prefer to provide on-the-job training rather than off-the-job training; larger companies prefer to provide off-the-job training (Bhattacharya, Harold Doty & Garavan 2014).

In examining employee training, research scholars are interested not only in the broad relation between company size and training provision but also in the relationship between company size and training type. On balance, the research suggests that larger companies are more likely to provide off-the-job training compared to smaller companies, with smaller companies more likely to rely on on-the-job, training (Bhattacharya, Harold Doty & Garavan 2014). According to Almeida and Aterido

(2015), larger firms undertake more off-the-job training, while small and medium enterprises (SMEs) tend to provide on **etheraj**ning relating to short-term business objectives or problems. There are several reasons why smaller companies often use onthe-job training. Firstly, the owners and managers in those companies do not recognise the existence of external organisations that can provide service or training programs to meet the needs of those companies. Secondly, the owners of those companies are reluctant to spend money on employee training because they think that expenditure on employee training may be a waste of money due to the risk of trained employees moving to other companies to get better benefits. In other words, employee mobility may be achieved more easily after acquiring advanced skills. Thirdly, owners and managers in small companies are not willing to provide off-the-job training because they assume that the returns on investment in formal training could only be realised in the long run rather than the short run (Almeida & Aterido 2015; Johnson 2002; Klaasen 2013; McMaster 2001; Smith, SA & Mazin 2011).

Waddoups' (2011) study of company size and its impacts on choice of training type in Australian companies focused on examining the relationship between company size and structured work-related training or formal training. The structured, work-related training consists of a set of training seminars, workshops, audio-visual presentations and conferences devoted to training, as well as classroom style instruction or self-paced training courses. This study explicitly excluded unstructured training such as learning by doing, asking questions of co-workers or other ad hoc methods of learning about production processes. The results show a positive correlation between the probability of structured training and company size (Waddoups 2011). In addition, the attitudes of managers about the effectiveness of employee training provision in the form of off-thejob training in larger companies are more positive than in smaller companies (Shepherd et al. 2011).

Azmi and Mushtaq (2015) introduce some complexity in the relationship between company size and training type. They note that regardless of company size, the human resource departments of companies are in charge of coordinating training programs in their companies. In these cases, most employee training was carried out on the job by direct line managers and little off-the-job training was offered to new employees (Azmi & Mushtaq 2015).

In summary, the research shows a positive relationship between company size and employee training provision. Moreover, smaller companies tend to use on-the-job training, while larger companies prefer to provide off-the-job training for employees.

# 2.7 Conceptual model, research questions and hypotheses

# 2.7.1 Conceptual model

In addressing the research questions and literature review, a conceptual model and hypotheses are relied upon to explore training practices and the relationship between company size, company ownership and the attitudes of managers towards employee training in the context of the construction industry in Vietnam.

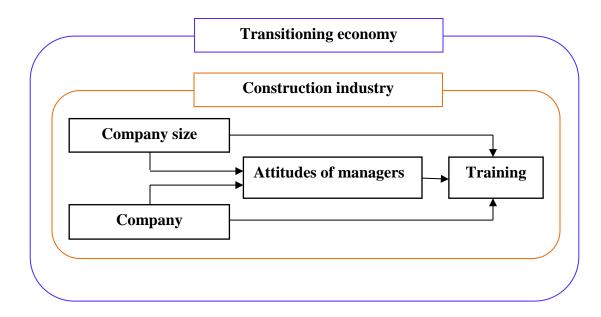


Figure 2.1: Conceptual model

The conceptual model and following research questions and hypotheses are framed by the contexts, nuances and ambiguities in the research scholarship concerning training. The framework utilises the findings from a range of studies on the relationship between training provision, company size, company ownership and the attitudes of managers. However, the nature of those relationships is still unclear and under-theorised in particular contexts. Specifically it is unclear whether a number of the key theoretical premises and findings that are drawn from international research have universal application, noting here that the international research is primarily drawn from Western industrialised settings. The construction industry in the context of Vietnam will form the basis of an exploration and examination of these relationships. The available scholarship suggests that providing employee training and choosing training types may be affected by company size, company ownership and the attitudes of managers. In addition, the attitudes of managers towards training may be affected by company size and ownership type. Therefore, the conceptual model above is efficacious not only to assess the relationship of each factor to a training type, but also to identify the impact of company size and company ownership on the attitudes of managers towards employee training.

# 2.7.2 Research questions and hypotheses

To assess the relational questions posed by this thesis it is important to establish baseline data about training practices in the Vietnamese construction industry. This objective is addressed by research question 1: *What employee training practices are currently used in construction companies in Vietnam?* 

#### 2.7.2.1 Relationship between company size, and training practice

There is insufficient empirical research on the relationship between training and company size in Vietnam, particularly in the construction industry. Employee training plays an important role in the human resource development of organisations because it improves the skills of employees and creates enhanced human capital for organisations that is impossible for competitors to imitate. Training is a key role of human resource development and it is recognised as a function of human resource management (Trivedi & Raval 2015, p. 314; VEF 2012) to develop workforce skills. Moreover, 'the most successful companies and the most successful countries will be those that manage human capital in the most effective and efficient manner' (Stanko, Zeller & Melena 2014, p. 93).

On the basis of existing research scholarship about training in Vietnam, it was uncertain as to whether training was viewed as a means of enhancing human capital and whether training provision was shaped by company size. International research suggests that company size is a key factor in that larger companies were more likely to provide training but it is unclear whether this particular factor was important both to the provision of training generally and to the provision of particular types of training; international research suggests the greater likelihood that larger companies will provide off-the-job training relative to the provision of this type of training by smaller companies(Solomon, Fernald & Tarabishy 2002).

It is the application of this particular area of the research scholarship to the Vietnamese construction industry that informed research question 2: *What is the relationship between company size and employee training types in construction companies in Vietnam?* and the development of the following four hypotheses to be examined by this thesis:

- H1. Both small and large companies provide employee training.
- H2. Company size is associated positively with the decision to invest in training.
- H3. Larger companies provide off-the-job training to their employees more than smaller companies.
- H4. Smaller companies rely primarily on on-the-job training more than larger companies.

#### 2.7.2.2 Relationship between company ownership, and training practice

The impact of company type and training provision in the Vietnamese construction industry is a focal point for this thesis and informed the development of research question 3: *What is the relationship between company ownership and employee training types in construction companies in Vietnam?* The Vietnamese government identifies the economic system as 'a socialist-oriented market economy'. Effectively this description points to a centralised economy in transition and also a market economy that increasingly accompanies a diversity of ownership structures, although the state-owned

enterprises are still identified as playing a leading role in the economy (Nguyen, TD 2012, p. 1). The economy includes state-owned enterprises, local private companies, FDI companies and joint-stock (partial privatisation) companies (Chan & Norlund 1998; Zhu & Fahey 2000).

Whether ownership type exerts an influence on training provision is presently uncertain. Truong and Le (2007) suggested that company ownership was a differentiating factor towards employee training provision (Truong & Le 2007). In addition, research in Asia also showed that there was a significant positive correlation between company ownership and training provision (Shen & Darby 2006; Tan & Batra 1996; Zheng, C, Morrison & O'Neill 2006). Moreover, according to Weinstein and Obloj (2002), companies with experience in the market economy tended to support employee training provision more than companies in the command, or centrally planned, economy (Weinstein & Obloj 2002). Yet scholars acknowledge that research remains inconsistent as to the precise relationship whether there is a significant correlation between company training provision and business ownership (Macpherson & Jayawarna 2007). These questions or relationships are potentially key to the construction industry because although the construction industry has encouraged a multitude of ownership types, state-owned companies still occupy a leading role. Consequently, state-owned companies are supported and sponsored for employee training by the Vietnamese government (Tran & Nguyen 2014; Vu, TTA 2012), yet this relation does not potentially contemplate the increasing influence of foreign investment on training structures and practice in the construction industry.

It is these findings from the relevant research that have informed the identification of the following three hypotheses to be examined by this thesis:

H5. FDI companies provide employee training more than local private companies.

- H6. Joint-stock companies provide training more than local private companies.
- H7. Local private companies provide training less than state-owned companies.

#### 2.7.2.3 Relationship between company size and the attitudes of managers towards training

A further focal point for this thesis was examining the attitudes of managers towards training and whether these attitudes are differentiated by company size. This is taken up by research question 4: What is the relationship between company size and the attitudes of managers towards employee training in construction companies in Vietnam? This question explores key premises in the HRM and HRD literature that link investment in training to a series of positive performance outcomes for organisations (Brown 2001). These include improved employee skills, knowledge and commitment, and increased productivity, competitiveness and market share (Newman, Thanacoody & Hui 2011). While training is held to yield positive returns, equally there is research to suggest that managers consider that inappropriate training provision for employees may result in a waste of company time and resources (Almeida & Aterido 2015; Johnson 2002; Klaasen 2013; McMaster 2001; Smith, SA & Mazin 2011). Specifically in Vietnam, there is economy-wide research that suggests that companies were reluctant to provide employee training because they considered training expenditures as costs rather than investment (Truong & Le 2007). These key premises are explored in this thesis through the prism of the attitudes of managers with a particular interest in assessing whether attitudes towards employee training provision are influenced by company size. These questions and the findings from the relevant research have informed the identification of the following three hypotheses to be examined by this thesis:

- H8.Managers in larger companies will have more positive attitudes towards employee training investment compared to managers in smaller companies.
- H9.Managers in larger companies will have positive attitudes towards off-the-job training.
- H10.Managers in smaller companies will have positive attitudes towards on-the-job training.
- 2.7.2.4 Relationship between company ownership and the attitudes of managers towards training

The interest of this thesis in the attitudes of management towards training extends to examining the influence of company ownership and is addressed by research question 5:

What is the relationship between company ownership and the attitudes of managers towards employee training in construction companies in Vietnam? This question addresses a number of the key premises identified in the previous section but with a particular focus on the relationship between company ownership and decision-making on employee training (Huang & Renyong 2014; Jones, JT 2005). This focus has informed the development of the following three hypotheses to be examined by this thesis:

- H11. Managers in FDI companies will have more positive attitudes towards training investment compared to managers in local private companies.
- H12. Managers in joint-stock companies will have more positive attitudes towards training investment compared to managers in local private companies.
- H13. Managers in state-owned companies will have more positive attitudes towards training investment compared to managers in local private companies.

## 2.8 Conclusion

This chapter has reviewed the relevant research scholarship relevant to training provision. This review has identified that training as a field of scholarship is conceptualised from a range of perspectives. There is no unified theory of training and in this vacuum attention has tended to focus on those factors that drive training provision. These considerations are largely informed by the international research and are not specific to the Vietnamese context generally or the needs of the construction industry specifically. They have nevertheless framed the research questions and hypotheses to be examined by this thesis with a view to assessing the particular dynamics of training practices in the Vietnamese construction industry and examining also whether those premises that are key to the international research about training provision have application and meaning in the Vietnamese construction industry. The research design relied on to assess the research questions and hypotheses identified in this chapter are outlined in the following chapter.

# **CHAPTER 3: METHODOLOGY**

## **3.1 Introduction**

This thesis applies a quantitative approach by conducting a survey of managers in selected construction companies to explore training practices and examine the impacts of company size and business ownership on training types, as well as the attitudes of managers towards employee training in construction companies in Vietnam. The data was generated by a survey questionnaire, and analysed with statistical procedures that are consistent with the methodological approach of this literature. While the statistical techniques used here are relatively straightforward, this approach yields valuable insights regarding the relationship between the variables of interest. Furthermore, the methodology applied here is an extension on the previous quantitative studies of training provision in Vietnam, a point that is emphasised further below.

The next section outlines the research method and the reasons why it was chosen for this thesis. In section 3.3 the research design is presented to explain how cross-sectional data will be created and used for the analysis. This will include a general introduction to the questionnaire design and the data collection process. Next, in section 3.4, the details of the population characteristics and sampling methods will be explained. In section 3.5 the structure and contents of the questionnaire are outlined in detail and the process employed to complete the fieldwork is also presented. Section 3.6 presents detailed explanations of the variables that were used for this thesis, including training types, business ownership or business forms, company size, as well as the ways to measure attitudes of management staff or respondents towards employee training including training types. Following this section, section 3.7 introduces the statistical techniques that are used to analyse the collected data. Section 3.8 shows comparison of the methodology with previous studies of Vietnamese human resources management practices. The methodological assumptions, limitations and delimitations are discussed in section 3.9, while the relevant ethical assurances are outlined in section 3.10. Finally, section 3.11 offers a summary of the chapter.

## **3.2 Research method**

Bryman (1984) makes a number of useful distinctions between quantitative and qualitative methodological approaches. Quantitative research is often consistent with a positivist philosophical position and is most often conducted through the use of structured data collection and analysis. Such an approach emphasises the use of fixed measurement aimed at testing one or more hypotheses in an attempt to obtain knowledge that might be considered objective (Bryman 1984). Moreover, quantitative analysis can also discover novel or unanticipated results. Qualitative research, on the other hand, can be more flexible than quantitative research. It often emphasises the discovery of novel or unanticipated findings and the possibility of altering research plans in response to such serendipitous occurrences. Bryman further argues that qualitative research data can be considered 'rich', by which is meant that it creates data with a great deal of depth (Bryman 1984).

While both approaches can offer significant value in understanding a research problem or question, the specific method selected for this research was quantitative. The quantitative method allowed the researcher to examine the relationships between variables that were central to answering the research questions. Quantitative inquiry is especially useful in testing hypotheses; a goal of the proposed research was to provide data to test the general research questions and the hypotheses.

The quantitative method was also appropriate for this thesis because the findings were measurable, and questions about relationships among measured variables using quantifiable data for purposes of explaining and predicting phenomena were addressable (Balnaves & Caputi 2001). The method generalised from a sample to a population of interest. Data from this kind of inquiry presented an objective rather than subjective viewpoint (Creswell 2003). This is not to suggest that subjective influences are completely absent – the topics of interest and design of the questionnaire, for example, are each influenced by the subjective interpretation of the researcher. However, in the case of research into a subject that is yet to be studied, such as the present case (training within the Ho Chi Minh City construction industry), a quantitative analysis has the

potential to detect, uncover, and perhaps confirm, some basic relationships between the agents of interest.

The present thesis employs quantitative analysis primarily because of its alignment to the research question and the interest of this thesis is establishing the dimesons of training provision in the Vietnamese construction industry. An important consideration in this choice of methodology and method was the absence of detailed empirical research identifying the relationship between training and company variables in the context of the Vietnamese construction industry. Qualitative research can support and refine the contributions made by quantitative studies and it is anticipated that in the contact of the examination of training in the construction industry that further qualitative research would be required to research more intensively the patterns of training provision provided by a quantitative approach. Flick (2014), for example, provides a valuable explanation of how qualitative research can support and improve upon quantitative analysis. Initial exploratory studies, such as this one, often begin with survey data (through existing records or created with questionnaires and interviews). However, further studies can reveal these results to be preliminary and, as representative samples, offer simply an overview of the subject of interest. Qualitative data can play a vital role in illustrating more details and nuances than what is apparent in such quantitative data analysis. Through the use of interviews that present open-ended questions, qualitative studies can shed further light upon the statistical relationships observed in quantitative studies. In this sense, quantitative methods need qualitative methods for explaining the relations that are found by quantitative methods (Flick 2014). Therefore, qualitative research can be very useful in future research to uncover more information and insights about the relationship between variables that were explored by the current thesis.

# 3.3 Research design

This research utilises a point-in-time collection or a cross-sectional design. This crosssectional study is effectively a 'snap-shot' of the construction industry (and its training practices/attitudes) at a particular point of time. The time aspect is important as the literature review now emphasises the changes and developments that occurred before and during the time at which the data for this thesis was collected (survey distributed). It allows the researcher an opportunity to collect and analyse data to secure the needs for the thesis (Polonsky & Waller 2005). The cross-sectional design facilitated the collection of quantitative data to answer the research questions based on statistical techniques (Balnaves & Caputi 2001).<sup>1</sup> Data was collected through a survey questionnaire (5-point Likert scale). The original questionnaire was in English, and this was translated into Vietnamese for data collection. The collected data was translated back into English with equivalence of meanings. In addition, a pilot test questionnaire was completed before conducting the main survey.

This research uses a mail survey questionnaire design to gather numeric descriptions of the population about the current training practices and data from the design examined the relationship between the independent variables and the dependent variable to meet the research objectives. The advantages of mail surveys include encouraging respondents to reply to questionnaires at a convenient time; in addition, the researcher can utilise additional facilities such as email, web or postal delivery for increasing the response rate (Dillman 2000). Moreover, the use of the mail survey questionnaire is feasible because of the geographically dispersed population and the minimum cost factor (Creswell 2003). Key details regarding the target population and sample, in addition to the specific construction of the survey instrument, are now explained.

# **3.4 Population and sampling technique**

The population of this thesis is construction companies in Ho Chi Minh City. This city is the largest city in Vietnam with a population of 7.955 million people, while the capital Ha Noi has a population of 7.067 million people (Ly 2014). The construction companies defined in this thesis include companies in fields relating to construction such as construction designers, engineering consultants, contractors, sub-contractors and real-estate companies. The list of 7000 construction companies in a variety of business forms

<sup>&</sup>lt;sup>1</sup> Although a longitudinal analysis can also be useful for testing the decisions of agents over time, in this particular case a cross-sectional design is the best approach as no longitudinal (or even panel data) exists for the topic at hand. Obviously, the time constraints of the research are a factor, and constructing a longitudinal data set can take a number of years (Polonsky & Waller 2005). As explained in a later section, future work on this topic could benefit from the application of a longitudinal study.

(state-owned companies, local private companies, FDI companies and joint stock companies) are collected from Business Directories in Ho Chi Minh City.

The target respondents are the management staff of the construction companies in Ho Chi Minh City. They include general managers, functional managers, HRM managers or heads of personnel departments, line managers or those who have some level of responsibility for human resource management within the companies.

Stratified random sampling was applied in this thesis. The population is divided into strata using the criteria of business ownership form and company size. Then, simple random samples were taken from the listing in each stratum. Random sampling provides the best method to support generalisations, since this sampling approach can best approximate the heterogeneity of the population under study (Storey 2004). Small strata are not a problem for this research and the population is large enough to obtain a sufficiently large sample in each strata.

This sampling technique can generate the possibility of greater accuracy because 'stratifying criterion are represented in the same proportions as in the population' (Cramer 2009). If the numbers in some strata are likely to be small, it may be necessary to sample disproportionately. However, when this occurs, it has to be recognised that the sample is differentially weighted relative to the population, thus estimates of the sample mean will have to be corrected to reflect this weighting (Cramer 2009).

To determine the sample number, a table published by Kotrlik and Higgins (2001) and Raosoft (2013) presented a configuration that was applicable to this research. The data for this research were continuous. The table indicated that for continuous data with significance level ( $\alpha = 0.05$ ) or a 95% confidence level, the required sample size for a population of 7000was 365 (Kotrlik & Higgins 2001; Raosoft 2013). The data set created in this research is much larger than this minimum recommended sample size.

## 3.5 Questionnaire design and data collection

Typically, survey research employs a face-to-face interview, a telephone survey or a survey questionnaire (Creswell 2003). Of the three data collection techniques, the survey

questionnaire was appropriate for this thesis because it allowed access to a geographically dispersed population. The questionnaire provided the quantitative data needed for the research. Compared to the other techniques considered for this thesis, the survey questionnaire obtained data from a geographically dispersed population at a relatively low cost (Creswell 2003).

The survey questionnaire developed for this research provided a quantitative description of the attitudes of managers towards employee training provision in construction companies. In addition to providing and analysing the quantitative data of the independent and dependent variables, a survey can also allow for the testing of statistical relationships between the variables (Creswell 2003). For an inductive analysis, the survey is designed such that the sample can allow inferences to be made about the population (Rebecca C Burleson et al. 1998).

In order to obtain the necessary survey respondents, data collection for this research was consigned to a fieldwork company in Ho Chi Minh City, Vietnam. This company was instructed to carry out the survey consistent with ethical guidelines provided by the University of Western Sydney Human Ethics Review Committee (HREC).<sup>2</sup> Furthermore, the researcher was an active participant in the collection of the data, collaborating with the fieldwork company, and assisting in the successful identification of the target firms.

In preparation for the final delivery of the survey questionnaire to all target recipients, a smaller pilot test was conducted by hand-delivering the survey questionnaire to the target population of managers in construction companies. These companies were chosen from the existing list of 7000 construction companies in Ho Chi Minh City. The pilot questionnaires were conducted from 5<sup>th</sup> November 2012 to 19<sup>th</sup> November 2012 and reflections on the pilot study were incorporated into the final draft of the questionnaire. The pilot results showed that the questions were clear and that their construction was not a barrier to drawing responses from respondents. However, an instruction relating to the

<sup>&</sup>lt;sup>2</sup>Please note that since the time of the application to the Committee, the name of the university has changed from the University of Western Sydney to Western Sydney University.

marking of responses answers was added in the introduction section of the questionnaire. It guided respondents more clearly in how they were to indicate their preferred response. Following these changes, the revised questionnaire was delivered to target respondents who are managers in construction companies in Ho Chi Minh City.

The questionnaire was sent to the target respondents by mail, email and fax. The questionnaire was accompanied by a cover letter to encourage respondents to willingly and voluntarily participate in the survey. A participant information sheet was also included. The letter also provided guidance in filling in the questionnaire. In addition, to maintain confidentiality of the participants, each return envelope was assigned a code number to be used only for follow-up purposes. As the survey questionnaires were returned, the participants' names were removed from the list and the coded, returned envelopes were destroyed.

The survey questionnaire was first initiated by sending out a large number of emails (approximately 4000) to construction companies which were chosen randomly based on the stratified samples (i.e. company form). However, the respondents were too few, with only about 10 questionnaires returned within 1.5 months. This was despite follow-up procedures involving a reminder e-mail consistent with survey techniques (Mitchell 2008). Following discussions with the fieldwork company, the strategy was adjusted to overcome the possibility of outdated contact details, and potential problems created by a lack of personal correspondence with respondents. This latter factor may have led some respondents to ignore the email due to their own time constraints.

To obtain a higher response rate, the researcher checked the contact details by telephone and email before sending questionnaires to those companies, as well as enquiring as to whether they were willing to participate in the survey. Moreover, any respondents who agreed to answer right away during the follow-up meant they consented to complete the questionnaire by telephone, which in some cases was completed immediately. In summary, the questionnaire was completed via the mailed hard-copy form, or via the telephone in those cases where the respondent had agreed beforehand to do so. By doing this, the current study obtained a total of 510 responses to the questionnaires, a significantly larger sample than previous studies of training practices in Vietnam conducted by Truong and Le (2005) or Truong and Le (2007). Data was collected in the period 20<sup>th</sup> November 2012-20<sup>th</sup> February 2013.

Finally, it should also be noted that in this process there was extensive effort made by the fieldwork company, and the researcher, to ensure that the target respondents (company managers) were those completing the survey questionnaire. In many cases, this process involved the observation of protocols designed to confirm the identity of the respondent.

The survey questionnaire itself is designed with three sections: (1) Section A includes general questions about the company, business form and company size; (2) Section B includes the main questions focused on gathering information about training practices of the construction companies and the attitudes of managers towards employee training types; and (3) Section C is designed to collect respondents' bio-data.

As explained above in section 3.4, the target respondents included a variety of managerial-level staff in the construction industry in Ho Chi Minh City. This includes companies in the fields of construction, architecture, consulting and real estate. The inclusion of real estate reflects the coding and definition of construction in business directories in Vietnam and in practice real estate companies are routinely engaged in construction industry work. The companies were included from four major forms in Vietnam: state-owned companies, private companies, FDI companies (including 100% foreign-owned capital and joint-venture companies) and joint-stock companies. Therefore, the survey questionnaire is designed to capture both the training practices and attitudes found in these company ownership types as well as different company sizes.

In addition to capturing descriptive information about the respondents, i.e. their company ownership form and size as well as information relating to training provision, the questionnaire was designed using the related terms and standard definitions found in the literature. This includes specific definitions of on-the-job training, off-the-job training and instructions that assist respondents to self-administer their answers. The

next section now outlines some of the key definitions and categories used as part of the questionnaire.

# 3.6 Variables used in the survey questionnaire

This section will provide a clear outline of the range of categories that were used as variables of interest within the questionnaire. The categories are the foundation of the questionnaire, as respondents select their respective responses from among each of these categories. Therefore, a careful outline of these categories can act as important background for the discussion of the data analysis, and the results (in the next chapter).

# **3.6.1 Training types**

The thesis explores the combination of factors associated with the provision of off-thejob training and on-the-job training. These types of training and their usage in the literature were addressed in Chapters 1 and 2. These categories of off-the-job training and on-the-job training are consistent with the literature (for example see Adams 1992; Tung 2001; Kotey and Folker 2007; Odusami, Oyediran and Oseni 2007; Truong and Le 2007; Jones and Dexter 2014), where off-the-job, training includes the following large range of methods:

- Lectures
- Group discussion
- Role playing
- Sensitivity training
- Video tapes
- Simulations
- Case studies
- Computer software
- Internet teaching
- College or university courses
- Vocational school courses
- Overseas workshops

Informal, or on-the-job, training includes the following smaller range of methods:

- Job rotation
- Apprenticeship
- Assigning trainees as members of taskforces

(Adams 1992; Jones, WM & Dexter 2014; Kotey & Folker 2007; Odusami, Oyediran & Oseni 2007; Truong & Le 2007; Tung 2001).

This thesis applies the same categories for formal or off-the-job training and informal or on-the-job training as mentioned above. This means that the categories related to training types for this thesis are consistent with other previous studies. In addition, the meaning of those training types was also explained clearly in the questionnaire for gathering data from respondents.

# 3.6.2 Business ownership/Business forms

Four main forms of business ownership in Vietnam are used for this research. These categories of ownership type are standard in both the literature and government classifications (Le, CT & Truong 2005; Truong & Le 2007; Zhu et al. 2008). The specific characteristics for the following four ownership types were outlined in Chapter Two:

- (1) State-owned companies
- (2) Local private companies
- (3) FDI companies
- (4) Joint-stock companies

# 3.6.3 Company size

According to Vietnamese regulations, company size may be classified in a variety of configurations based on total investment capital or number of employees of companies from different industries. However, this thesis will adopt the definition of small and medium enterprises (SMEs) of the Vietnamese government found in Decree

56/2009/ND-CP, dated 30/6/2009, for construction companies in Vietnam. Maintaining consistency with this decree enables the thesis to offer findings and recommendations that are consistent with the Vietnamese government's interpretation of company sizes within the construction industry. Company size is based on the average annual number of employees of these companies. These include: (1) 'super-small companies' or micro ('siêu nhô') companies employing 10 employees or fewer; (2) 'small companies' employing between 11 and 200 employees; (3) 'medium companies' employing between 201 and 300 employees. In the survey design for this thesis the term 'super-small' rather than 'micro' was used as it was a term with more intuitive appeal to respondents. For this research purpose, the SMEs consist of 'super-small companies', 'small companies' and 'medium companies' that can be grouped into a category called 'smaller companies'' (Nguyen, TD 2009). Furthermore, (4) 'larger companies' (LEs) are those employing over 300 employees.

### **3.6.4 Attitude measure**

The attitude measure of a respondent is based on the average score (using a 5-point Likert scale) of the management responses to the statements about training on the questionnaire.

Respondents were asked to address the statement for both off-the-job training and onthe-job training. Management staff were asked to indicate on a 5-point Likert scale, ranging from one (1) = 'strongly disagree' to two (2) = 'disagree', three (3) = neutral/not sure, four (4) = agree and five (5) = strongly agree.

Survey respondents express some degree of agreement or disagreement with each of the statements provided to them as part of the questionnaire. For example, three specific statements on the questionnaire include:

- 'Training on-the-job contributes to improve employee performance'
- 'Training on-the-job is the most effective way to increase employee skills'
- 'Training off-the- job increases sustainable competitive advantages'

The use of the Likert scales can be advantageous in research design as they are economical to administer and score, easily adapted to most attitude measurement situations and provide a direct assessment of attitudes when scales are well constructed (Davalos et al. 2016). As they were deployed in this thesis the scale was symmetrical in that each positive response was matched by an equally negative response. It is acknowledged that the "distance" between each individual response is not necessarily equal. However, the range of options presented is symmetrical around the neutral response. To be more specific, in both cases of agreement and disagreement with a statement, there is both an option of "strongly agree/disagree", and also simply "agree/disagree". Therefore, as utilised here there was an attempt to produce an equidistant range of options for the respondents. This was undertaken with a view of reducing bias in any particular direction. Furthermore, individual statements are assessed by respondents one at a time, and there is no attempt to use a summation of the responses in the interpretation of the results. This is intended to reduce bias in the results and allow the research to focus simply on the differing levels of responses to the statements, from managers in different companies.

## **3.7 Data analysis**

The quantitative analysis utilised the survey data to perform a cross-sectional investigation of the conceptual model. More specifically, a quantitative approach was used to investigate the relationship between (a) the use of employee training on the one hand, and (b) the wide range of company sizes and company ownership structures on the other. Furthermore, it would extend on these basic relationships to shed some light on the more complex issues of the attitudes of managers towards training, i.e. it tests the relationship between (a) the attitudes of managers towards employee training, and (b) the wide range of company sizes and company structures.

The statistical analysis that is applied in this thesis is consistent with recent studies in this area and also studies in other areas that seek to understand similar types of data. Four examples are now briefly discussed to demonstrate the type of analysis commonly employed in this literature when analysing these types of variables.

In the context of the literature on training practices among different company types and sizes, two important studies use similar techniques. Firstly, in the research of Kotey and Folker (2007), the authors analysed their data using the chi-square test statistic and multivariate analyses of variance (MANOVA) to examine differences in responses between different groups (Kotey & Folker 2007).Secondly, in their own contribution to the training literature, Macpherson and Jayawarna (2007), presented descriptive statistics and also used chi-square tests for data analysis to reveal a statistically significant variation of categorical variables, as well as to check whether their results support their hypotheses (Macpherson & Jayawarna 2007).

Within the context of studies in other social sciences, tests similar to those applied in this analysis have also been used to good effect. For example, in the research of Jamshidi, Farajpoir and Sabet (2014), the authors used one-way analysis of variance (ANOVA) and the Pearson correlation test (with a significance level of 0.05) to examine their hypotheses. In addition, they applied the post-hoc Tukey range test to explore differences among groups of variables (Jamshidi, Farajpour & Sabet 2014). Finally, in the data analysis of the research of Kalemoglu-Varol and Erbas (2015), the authors presented descriptive statistics (number, percentage, mean and standard deviation) and then applied an independent sample t-test and a one-way analysis of variance to identify differences between dependent and independent variables. In the one-way analysis of variance, the Tukey honest significant difference (HSD) post-hoc test was performed in order to find which particular groups demonstrate significant differences (Kalemoglu-Varol & Erbas 2015).

The analysis techniques applied in the four research studies above are also appropriate for this thesis: i.e. Pearson's chi-square test, analysis of variance (ANOVA), especially with the post-hoc Tukey HSD test to examine relationships between categorical variables and to find differences between continuous variables to meet the analytical purposes of this current thesis. The Pearson's chi-square test, ANOVA and Tukey HSD post-hoc test are explained in more detail in the next section and presentation of their basic formulas is also included.

## 3.7.1 Pearson's chi-square test

The Pearson's chi-square test is appropriate for the analysis of categorical data and is considered a non-parametric test. In short, the test analyses the frequency, or 'counts', of data points that belong to specific categories. The test is applied in this case to check whether there is a statistical relationship between certain categorical variables, in this case, groups. More precisely, the test is applied to check whether there exists some significant relationship between:

- 1) provision of training and company size, and
- 2) provision of training and company ownership structure.

The data must satisfy some specific conditions if the chi-square test is to work correctly. Firstly, the variables must be mutually exclusive, that is each company must belong to only one category within each of the variables. Secondly, the data from all the cells must add up to the total count, and no item should be added twice. Thirdly, there must be enough data to perform the test, which means that there are at least 5 counts in every cell. These conditions were completely met by the current thesis data, as the count for each cell was very large from 30 up to 100 per cell.

The formal specification of the test is quite simple:

$$\chi^2 = \sum \frac{(\mathbf{0} - \mathbf{E})^2}{\mathbf{E}}$$

Where:

O = the number of observed frequencies within each category sample

E = the number of expected frequencies for each category

Pearson's chi-square test maintains a null hypothesis that the variables are independent, i.e. that there is no relationship between them. In other words, if the null hypothesis can be rejected then there would appear to be some relationship between the variables. In doing so, the test can tell us the probability of independence in a distribution of data, i.e. the probability that the observations in the data do not have a relationship to each other.

Moreover, for the purpose of this research, the standard level, or an acceptable significance level, for hypothesis tests was set for determining when to reject the null hypothesis. The standard value for a significance level represented by  $\alpha$  was set at 5%, which means that  $\alpha = 0.05$ , corresponding to  $(1-\alpha) = 0.95$  probability of a correct statistical conclusion when the null hypothesis is true. The level  $\alpha = 0.05$  was chosen for the analysis, which is the most commonly designated value in social science research for this parameter (Aczel & Sounderpandian 2006; Lipsey 1990).

The Pearson's chi-square test does not reveal the details about any relationship between the significant categories. In particular, the test only focuses on the relationships between groups, rather than differences between them. As mentioned above, Pearson's chi-square test is appropriate for non-parametric data only, it is not applicable for continuous data. Thus, ANOVA is applied for the statistical tests of the continuous data used in this project.

## 3.7.2 Analysis of variance (ANOVA) and post-hoc testing

Analysis of variance (ANOVA) is a test that searches for a difference in the variance of the mean from different groups. In this thesis, the ANOVA test is employed to check for significant differences between ownership groups and company size on one hand, with statements relating to the attitudes of managers towards employee training provision. These statements are first divided into comments regarding off-the job training and, second, on-the-job training. These statements are measured using a Likert scale and are thus numerical measurements of these attitudes. More precisely, the test is applied to check whether there exist some significant relationships between:

- 1) attitudes towards training and company size
- 2) attitudes towards training and company ownership structure.

The test is based on the construction of a ratio that is two measurements of variance, i.e. it creates a ratio between two measurements (an 'F statistic'). The F-statistic is then used to identify the level of statistical significance, i.e. is the difference between the groups

enough to claim they are really statistically significant. The simple ratio creating the Fstatistic is presented as:

Estimate of the population variance based on the differences among the sample means  $(\sigma_B^2)$ 

**F** =

Estimate of the population variance based on the variation within the sample  $(\sigma_W^2)$ 

Or

$$\boldsymbol{F} = \frac{\sigma_B^2}{\sigma_W^2}$$

Although this ratio suggests the numerator and denominator are simply measurements of variance, the test applies two different measurements of variance. The measurement on the numerator is often referred to as the 'between groups estimate' (BGE), while the denominator is referred to as the 'within groups estimate' (WGE). As specified below, the F-statistic is the ratio of the variance observed between groups and the variance identified within the groups:

$$F = \frac{\sigma_B^2 = BGE}{\sigma_W^2 = WGE}$$

These estimates can be further understood by the formula below. The BGE can be understood as the mean of the variances, while the WGE can be interpreted as the variance of the means. Once again, the equations are:

$$BGE = \sum_{i=1}^{k} n_i \, (\overline{x}_i - \overline{\overline{x}})^2 / k - 1$$

$$WGE = \sum_{i=1}^{k} (n_i - 1) s_i^2 / N - k$$

Where:

 $n_i$  = the sample size of the i<sup>th</sup> sample group k = the number of groups N = the total number of all observations  $s_i^2$  = the variance of the i<sup>th</sup> sample group  $\overline{x}$  = the mean of all observations  $\overline{x}_i$  = the mean of each specific sample.

In addition, the critical value (p value) that is applied by the current thesis is 0.05. In simple terms, this means that the test considers a 5% chance (1 in 20) as the cutoff between acceptance or rejection of the null hypothesis. Specifically, the test is premised upon the assumption that if the variances are so different that the probability that they emerged from the same population is less than 1 in 20, they are then considered to be from different populations. This circumstance is a rejection of the null hypothesis.

The ANOVA test and the F-statistic can tell us when there is some statistically significant difference among a group of categories. However, they do not tell us which specific categories are different. The Tukey HSD test is a post-hoc test used to determine precisely which categories or groups are indeed different.

In many instances, a rejection of the null hypothesis through an ANOVA test does not mean that all the groups are different from each other. The Tukey test can help us to find out which particular ones are. The Tukey test looks for the honest significant difference *between groups*. It is a process of making pair-wise combinations of all the groups to find out which ones are significantly different. For the current thesis, the critical value (*p* value) being applied for the Tukey HSD test is again a value of 0.05.

The formal specification of the Tukey HSD post-hoc ANOVA test is the following:

$$HSD = \frac{\overline{X}_{i-}\overline{X}_{j}}{S_{\overline{X}}}$$

Where:

 $\overline{X}_i - \overline{X}_j$  = the difference between the i<sup>th</sup> and j<sup>th</sup> means

 $S_{\overline{X}}$  = the sample standard deviation of the sample means.

When the number of observations in each group is not equal, then the Tukey HSD test applies the modification devised by Kramer (1956) to the calculation of S. This is represented as:

$$s_{\overline{X}} = \sqrt{\frac{MS_{error}}{2} \left(\frac{1}{N_i} + \frac{1}{N_j}\right)}$$

Where:

*N<sub>i</sub>* and *N<sub>j</sub>* = sample sizes of groups *i* and *j* respectively *MS<sub>error</sub>* = the mean square error

In summary, for the purposes of investigating the relationship between categorical variables, a chi-square test is applied. For analysing the relationship between groups and continuous variables, ANOVA analysis is used together with the Tukey HSD test to search for precisely which variables are of significant difference from each other.

## **3.8** Comparison of methodology with previous studies of Vietnamese human resource management practices

In terms of the methodology that is applied, this thesis extends upon previous research in Vietnam relating to human resource management practices. For instance, Truong and Ha (1998) examined human resource development in state-owned enterprises in Vietnam. The authors utilised a mixed methods approach. They sent more than 200 questionnaires to SOEs in Ho Chi Minh City, Ba Ria-Vung Tau, Dong Nai and Song Be provinces, but only 47 questionnaires were returned (a yield of 24%). They also conducted in-depth interviews with managers and employees of eight SOEs in Ho Chi

Minh City. This research primarily took advantage of qualitative methods for in-depth analysis of their results. The quantitative analysis utilised only simple descriptive statistics to establish the percentage or frequency of specific variables. For example and based on the survey, they concluded that on-the-job training was widely used in the SOEs (77%) (Truong & Ha 1998).

A quantitative approach was relied upon by Truong and Le (2005) in their examination of human resource management practices in Vietnam. Truong and Le (2005) utilised a questionnaire for data collection that featured a 5-point Likert scale; their respondents were HR managers and general managers, as well as those in charge of HRM within the organisation. In their data analysis, the authors focused on factor analysis to identify the dimensions of HRM practices. Only 137 valid questionnaires were returned for a yield rate of 9.4%. By company ownership type, the sample consisted of 42.3% state-owned enterprises (SOEs), 27% FDI companies, 15.3% joint stock companies and 15.4% local private companies. By industry, the companies split into 54% in manufacturing, 19% in services, 3.6% in transportation, 8.8% in construction and 15.3% in commerce (Truong & Le 2005).

In other recent research Truong and Le (2007) in examining human resource management practices in Vietnam focused on a comparative study of enterprise ownership forms. The researchers also used a mail survey and received 169 valid returned questionnaires. By company ownership type, the sample consisted of 38% state-owned enterprises, 25% FDI companies, 20% joint stock companies and 17% local private companies. By industry, they included 50.6% of their sample was located in manufacturing, 25.8% in services, 14.7% in training and 8.9% in construction. The research relied upon descriptive statistics, and applied logistic regression models in the data analysis (Truong & Le 2007).

In summary, the previous research relating to human resource management practices in Vietnam provides relevant points of consideration for the current thesis. In terms of research design, data collection and its applied data analysis techniques this thesis extends the research design utilised by Truong and Ha (1998), as well as Truong and Le

(2005) and Truong and Le (2007) with the objective of establishing richer research understandings of training provision in Vietnam. The research design utilised by this thesis uses a larger sample than previous relevant studies and applies a range of statistical tests, noting also that sample is confined to one industry, being the construction industry.

#### 3.9 Methodological assumptions, limitations and delimitations

For the research purposes, the assumptions are:

- 1. the researcher assumed that the participants honestly responded to the survey questionnaire
- 2. the researcher assumed that respondents voluntarily participated in the research
- 3. researcher biases did not interfere with participant responses.

The limitations of this thesis include a sample that may not be large enough to generalise across the entire population. It is noted that the survey is confined to construction companies in Ho Chi Minh City. Additionally the research design does not enable the researcher to instigate a more probing analysis of each organisation's training practices, or to place the organisation in context. This would require analysis of the benefits and limitations of training from a diverse range of stakeholders, including those who are presently excluded from training. Further, while the research design is based on a management representative completing the questionnaire, there are limited auxiliary measures within the thesis to assess whether these responses reflect the organisation's approach to training or are an individual response by the participant completing the platform for further qualitative research that would be well-placed to address a number of these limitations.

## **3.10 Ethical assurances**

This thesis was designed and developed using the standards for conducting research with human participants. Prior to beginning the thesis, approval was sought and obtained from the Ethics Committee of the University of Western Sydney. The main principles applied were 'doing no harm' to or 'making no adverse effects' on all participants from conducting the research. Therefore, the survey was undertaken in accordance with the standards of the University of Western Sydney Human Ethics Review Committee (HREC) which utilises the protocols encapsulated by the National Ethics Application Form (NEAF). Moreover, data has been de-identified to protect the anonymity of participants and participation in completing the survey was voluntary. In addition, there were agreed protocols around follow-up processes consistent with the protocols outlined in the NEAF application to the University of Western Sydney Human Ethics Review Committee (HREC).

Each participant in the research was informed of the research via a cover letter either before or on receipt of the survey questionnaire. A project information sheet was also included. The participants were advised of the purpose of the research, how to complete the questionnaire and advised that their decision to participate in this research was totally voluntary. If they chose to participate, consent would be assumed to be granted upon receipt of the completed survey by the researcher or through the agreement to complete the survey questionnaire by telephone.

## 3.11 Conclusion

This chapter indicates the rationale for the selection of a quantitative research method and a cross-sectional research design; it defined the appropriateness of the method and design relative to the goals of the study (Creswell 2003). It also included further discussion on the kind of population and the location of the thesis along with a description of the sample size. Other subjects discussed were the survey, the data collection plan, the appropriate follow-up notices and the description of the instrument.

Confidence existed that the survey instrument would yield the quantifiable data required to answer the research questions and hypotheses (Broner 2009). The specific population for this thesis was construction companies in Ho Chi Minh City; respondents are management-level staff of those companies. Moreover, the discussion of the proposed procedures concluded with the data analysis, followed by the summary. The details about findings and the statistical results of this thesis are presented in Chapter 4.

## **CHAPTER 4: RESULTS**

#### 4.1 Introduction

This chapter presents the results of the overall quantitative data from a survey of 510 managers in construction companies in Ho Chi Minh City. The chapter is organised into six sections, commencing with this introduction. In section 4.2 the sample demographics are reported, emphasising the basic characteristics of the respondents and their respective firms. Section 4.3 provides an overview of employee training practices, in particular discussing recruitment challenges and how these relate to training provision within the sample. Section 4.4 begins the reporting of the results, presenting an analysis of the relationship between company size and employee training practices. This is in terms of both provision and attitudes of management within the sample. Section 4.5 performs the same analysis as the previous section, but instead focuses on the relationship between company ownership type and employee training practices. Again, provision and the attitudes of managers are analysed. In both of these sections (4.4 and 4.5), the reporting of results is related to the hypotheses motivating the tests. Some tables of results are presented, however the majority of the results are reported and discussed in terms of their statistical significance (or otherwise). The majority of the specific tables of results are placed in the appendix. Finally, section 4.6 presents a stocktake summary of all the hypotheses and whether the various results support or undermine the posited relationships.

#### 4.2 Sample demographics

While the intention of the survey is to learn about construction firms' practices and attitudes, it is individuals who will actually provide the responses to the survey questions. Therefore, obtaining some understanding of the individual respondents is valuable in having a better understanding of the results, and interpreting them in later sections. This chapter begins with a description of the sample's demographics. In particular, the section is split into three general sub-sections in order to provide a clear picture of the individual managers providing the company-level data, and the basic

nature of the firms they represent. First, the age and gender of the respondents is presented. Second, their education and managerial experience is outlined. Finally, the size and ownership type of the companies (at which these managers are employed) is discussed. Using these three sub-sections, a basic 'snap-shot' of the individual respondents can be created.

## 4.2.1Age and gender

Although the respondents to the questionnaire are each classified as management-level employees, the demographic information presented below suggests the majority of the respondents were relatively new to managerial roles. The largest group of managers were aged between 30 and 39 years (comprising 48% of the total sample), while the second largest was the younger cohort of 20–29 years (35% of the total sample). These two groups, therefore, completed the overwhelming majority of the survey questionnaires.

The survey was aimed at managers, and in particular those who might have some influence over the provision of training at their respective companies. However, only 16.2% of the respondents were aged 40 years or over, while the percentage of respondents 50 years or older is only 3.7%. As will be further emphasised in sub-section 4.2.2, the age and managerial experience of the respondents suggests the survey may have encountered some difficulty reaching the upper levels of the management hierarchy. With regard to the gender of the respondents, the majority of respondents were male, with just over half of total survey questionnaires being filled out by men (58% of respondents were male). Tables 4.1 and 4.2 below present the details in regard to the age and gender of the survey respondents.

Age group (years)	Frequency	Percent	Cumulative percent
20–29	180	35.3%	35.3%
30–39	247	48.4%	83.7%
40–49	64	12.5%	96.3%
50–59	16	3.1%	99.4%
60 and over 60	3	.6%	100.0%
Total	510	100.0%	

Table 4.1	Age of	survey	respondents
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Gender	Frequency	Percent	<b>Cumulative Percent</b>
Male	293	57.5%	57.5%
Female	217	42.5%	100.0%
Total	510	100.0%	

 Table 4.2: Gender of survey respondents

## **4.2.2 Education and managerial experience**

The demographic data in regard to education and experience presents a group of managers who have completed university study and are relatively new to their management roles.

Over 90% of the managers who completed the survey questionnaire had obtained a university degree (91.4%). While this is perhaps not unexpected, it does suggest that individuals without university qualifications are rarely rising to managerial positions in the construction industry. The vast numbers of construction workers, and even those who have obtained significant on-the-job training, are unlikely to reach even the lower levels of the managerial hierarchy. While an enormous number of respondents had completed a university qualification, only 16 managers out of the total 510 had completed a postgraduate degree (i.e. 3% of the total). The work experience of the respondents is predominantly within the range of 1 to 9 years, i.e. most managers who completed the survey questionnaire had up to, or less than, 9 years total work experience. Indeed, only 19% respondents had more than 9 years of total work experience.

Given that most respondents appear to be in the early stages of their career, it is not surprising that the experience of the respondents in a managerial position is also concentrated around the lower year levels. The largest cohort of managers, in terms of actual managerial experience, is within the range of 4 to 6 years, i.e. 53% of the respondents had managerial experience in that range. Furthermore, another 32%

respondents had less than 4 years of managerial experience. The residual, only 15% of the respondents, had more than 6 years of managerial experience.

At this point, some informed comments can be made in regard to the managers who are receiving and completing the survey questionnaire. The managers to whom the responsibility of the survey has fallen are those who are at the earlier stages of their careers, have not yet completed a postgraduate qualification (if they are going to) and are relatively junior on the management hierarchy. Tables 4.3 to 4.5 present the details of education, work experience, and years in a management role.

Education	Frequency	Percent	Cumulative percent
High School	13	2.5%	2.5%
College	15	2.9%	5.5%
University	466	91.4%	96.9%
Postgraduate	16	3.1%	100.0%
Total	510	100.0%	

 Table 4.3: Education of survey respondents

**Table 4.4: Work experience of survey respondents** 

Work Experience	Frequency	Percent	Cumulative percent
1 to 3 years	68	13.3%	13.3%
4 to 6 years	131	25.7%	39.0%
7 to 9 years	214	42.0%	81.0%
10 to 12 years	49	9.6%	90.6%
Over 12 years	48	9.4%	100.0%
Total	510	100.0%	

Management role	Frequency	Percent	Cumulative percent
Under 1 year	48	9.4%	9.4%
1 to 3 years	117	22.9%	32.4%
4 to 6 years	272	53.3%	85.7%
7 to 9 years	45	8.8%	94.5%
10 to 12 years	10	2.0%	96.5%
Over 12 years	18	3.5%	100.0%
Total	510	100.0%	

Table 4.5: Management role of survey respondents

## 4.2.3 Company size and ownership type

Having established the basic characteristics of the individual respondents to the survey, an initial inspection of company size and ownership type is appropriate. Both of these company characteristics are central to the motivation of the thesis, and so understanding the composition of the sample across these two dimensions is important.

The total population of construction companies in Ho Chi Minh City numbers 7000 and the sample drawn for this thesis is 510, approximately 7.3% of the population. The relative size of companies is determined by number of employees. A super small company has up to 10 employees, small companies from 11 to 200, medium from 200 to 300 and large companies more than 300 employees. The sample is relatively evenly spread across these four categories, with at least 23% of the total sample residing in each of them.

Like company size, the sample is distributed relatively evenly across the four types of ownership. Each ownership type comprises almost precisely 25% of the sample. These features of the sample can be observed in tables 4.6 and 4.7.

Company size	Frequency	Percent	Cumulative percent
Super small companies	121	23.7%	23.7%
Small companies	142	27.8%	51.6%
Medium companies	125	24.5%	76.1%
Large companies	122	23.9%	100.0%
Total	510	100.0%	

### Table 4.6: Company size of survey respondents

## Table 4.7: Company ownership type of survey respondents

Company form/ownership	Frequency	Percent	Cumulative percent
State-owned companies	125	24.5%	24.5%
Private companies	126	24.7%	49.2%
FDI companies	127	24.9%	74.1%
Joint-stock companies	132	25.9%	100.0%
Total	510	100.0%	

This demographic analysis presents a clear picture of the survey respondents, both in terms of the individuals who completed the survey questionnaire (relatively junior level managers), and the companies themselves (equally distributed across both size and ownership form). The next section presents an analysis of the various training practices utilised by the companies.

## 4.3 Employee recruitment and training provision

Before the analysis of the various tests of hypotheses is presented, it is valuable to outline the basic training practices of the companies that have been surveyed. Building on the demographics discussed above, this section will present and discuss some statistics concerning the companies' motivation for using training, and the range of training practices employed by them. In particular, it will present some statistics regarding the companies' challenges in recruitment, and also their training provision over the last 12 months. Some additional information is reported regarding the provision and types of training, with some further details as follows:

## 4.3.1 Companies with a specific department or unit responsible for training

The respondents were asked if there was a specific department or unit responsible for training in their companies. Only 7.5% companies have a unit or department responsible for training, meaning that more than 90% companies do not have a specific or unit responsible for training (see Table 4.8).

Training unit	Frequency	Percent	Cumulative percent
Yes	38	7.5%	7.5%
No	472	92.5%	100.0%
Total	510	100.0%	

Table 4.8: Companies with a specific department or unit responsible for training

# 4.3.2 Companies have received sponsorship or subsidy from any organisations for training employee

To assess the incidence of external support for training, the respondents were asked whether their companies received subsidies or were the beneficiary of sponsorship arrangements for training employees. Less than 6% of companies surveyed received a subsidy for training employees, meaning that just over 94% of companies were not in receipt of sponsorship or training arrangements (see Table 4.9).

 Table 4.9: Companies that have received sponsorship or subsidy from any organisation for training employees

Sponsor/Subsidy	Frequency	Percent	Cumulative percent
Yes	30	5.9%	5.9%
No	480	94.1%	100.0%
Total	510	100.0%	

Those respondents who did receive subsidies or sponsorship were asked to indicate the source of those arrangements. Almost 57% of sponsorship or subsidy arrangements were sourced from government, 37% from private organisations and less than 7% from foreign organisations (see Table 4.10).

Company ownership		Sources	s of sponsors	hip	
		Government	Private	Foreign	Total
State-owned	Count	17	1	0	18
	% within row	94.4%	5.6%	.0%	100.0%
	% within column	100.0%	9.1%	.0%	60.0%
	% of Total	56.7%	3.3%	.0%	60.0%
Private	Count	0	1	0	1
	% within row	.0%	100.0%	.0%	100.0%
	% within column	.0%	9.1%	.0%	3.3%
	% of Total	.0%	3.3%	.0%	3.3%
FDI	Count	0	3	2	5
	% within row	.0%	60.0%	40.0%	100.0%
	% within column	.0%	27.3%	100.0%	16.7%
	% of Total	.0%	10.0%	6.7%	16.7%
Joint-Stock	Count	0	6	0	6
	% within row	.0%	100.0%	.0%	100.0%
	% within column	.0%	54.5%	.0%	20.0%
	% of Total	.0%	20.0%	.0%	20.0%
-	Count	17	11	2	30
Total	% within row	56.7%	36.7%	6.7%	100.0%
IUIAI	% within column	100.0%	100.0%	100.0%	100.0%
	% of Total	56.7%	36.7%	6.7%	100.0%

## Table 4.10: Sources of sponsorship

#### 4.3.3 The difficulty of recruitment

One possible motivation for investment in training is the difficulty of recruiting new employees with the skills and training required. Therefore, obtaining some information from the sample about the recruitment challenges facing these companies is potentially helpful in understanding any training practices they adopt. In particular, a useful comparison can be made to assess whether the incidence of training may parallel patterns in recruitment. With this in mind, respondents were specifically asked if they experienced difficulties in recruitment. More than 53% of companies did not face

difficulties in recruitment while a significant minority of companies, 47%, reported some difficulty.

In order to assess whether the recruitment challenges faced by companies were evident for all occupations, or for particular occupations, respondents were further asked to identify whether they faced difficulties in recruiting nominated occupational groupings. The results indicated that organisations encountered the most difficulty in recruiting managers and senior administrators, with nearly 80% of the relevant firms nominating these skills as difficult to obtain. Professionals, technical and scientific staff, craft and skilled operatives were each nominated by 10% to 20% of the relevant companies. Occupations such as clerical and secretarial staff, other manual workers, operators and assembly staff, or personal services and sales staff, were not nominated by the companies as difficult areas for recruitment. Tables 4.11 and 4.12 present the details of these survey responses.

Difficulty in recruiting	Frequency	Percent	Cumulative percent
No	272	53.3%	53.3%
Yes	238	46.7%	100.0%
Total	510	100.0%	

Table 4.11: Difficulty in recruiting any kind of employee

## Table 4.12: Occupations which are difficult to recruit

Occupational group	Frequency	Percentage
1. Managers & senior administrators	186	78.2%
2. Professionals	49	20.6%
3. Technical & scientific staff	28	11.8%
4. Craft & skilled operators	23	9.7%
5. Clerical & secretarial staff	17	7.1%
6. Other manual workers	13	5.5%
7. Operators & assembly staff	5	2.1%
8. Personal services & sales staff	4	1.7%

## 4.3.4 Training provision

Understanding precisely how many companies in the sample have provided some training for their employees is useful to ensure meaningful analysis in later sections, where company size and ownership form are tested for their potential relationship to the provision of training. Therefore, to assess the incidence of employee training across the sample, respondents were asked if their companies had funded or arranged any employee training over the preceding 12 months. The results indicate that just over 61% of companies had indeed arranged or funded training over the preceding year, while just over 38% of companies indicated that they have not funded or arranged training (see table 4.13).

Table 4.13: Companies that have funded/arranged any employee training over thepast 12 months

Funded/arranged any training	Frequency	Percentage	Cumulative percent
No	196	38.4%	38.4%
Yes	314	61.6%	100.0%
Total	510	100.0%	

With a view to assessing whether particular occupations or skills were the beneficiary of higher levels of training, respondents were asked to indicate the frequency of training for nominated occupational groups. Table 4.14 shows that the top five occupational groups nominated were technical and scientific staff, professionals, managers and senior administrators, clerical and secretarial staff and personal services and sales staff (all 60% or above). The other occupations nominated as areas of recruitment were craft and skilled operators, operators and assembly staff, and other manual workers, which were each also nominated at a rate above 50%.

Table 4.14: Order of staff by occupation trained over the past 12 months

Occupational group	Frequency	Percentage
1. Technical & scientific staff	244	77.71%
2. Professionals	241	76.75%
3. Managers & senior administrators	236	75.16%

Occupational group	Frequency	Percentage
4. Clerical & secretarial staff	231	73.57%
5. Personal services & sales staff	193	61.46%
6. Craft & skilled operators	182	57.96%
7. Operators & assembly staff	180	57.32%
8. Other manual workers	174	55.41%

In order to learn more about the types of training provided to the various occupational groups, respondents were asked to distinguish between training held off the job and that conducted on the job. The occupational groups that recorded the highest frequency of off-the-job training were professionals, managers and senior administrators, clerical and secretarial staff and technical and scientific staff (see Table 4.15). This is the case for both forms of off-the-job training: (1) on-site training and (2) off-site training. These statistics are presented in tables 4.15 and 4.16.

There is, however, a marked difference between the groups that received off-the-job training and those who are provided with on-the-job training. The occupational groups that recorded the highest frequency of on-the-job training were actually craft and skilled operators, other manual workers, personal services and sales staff and operators and assembly staff. As Table 4.17 clearly demonstrates managers and senior administrators, professionals and technical and scientific staff – despite receiving the largest quantity of training overall – receive negligible levels of on-the-job training.

Occupational group	Frequency	Percent*
1. Professionals	208	40.8%
2. Managers & senior administrators	205	40.2%
3. Clerical & secretarial staff	204	40.0%
4. Technical & scientific staff	200	39.2%
5. Personal services & sales staff	188	36.9%
6. Craft & skilled operators	174	34.1%
7. Other manual workers	166	32.5%
8. Operators & assembly staff	163	32.0%

 Table 4.15: Off-the-job (on-site) training and occupations

\* Percent = frequency/samples of 510

Occupational group	Frequency	Percent*
1. Managers & senior administrators	205	40.2%
2. Professionals	202	39.6%
3. Technical & scientific staff	202	39.6%
4. Clerical & secretarial staff	180	35.3%
5. Operatives & assembly staff	174	34.1%
6. Personal services & sales staff	165	32.4%
7. Craft & skilled operators	162	31.8%
8. Other manual workers	156	30.6%

## Table 4.16: Off-the-job (off-site) training and occupations

\* Percent = frequency/samples of 510

## Table 4.17: On-the-job training and occupations

Occupational group	Frequency	Percent*
1. Craft & skilled operatives	169	33.1%
2. Other manual workers	167	32.7%
3. Personal services & sales staff	164	32.2%
4. Operators & assembly staff	155	30.4%
5. Technical & scientific staff	19	3.7%
6. Professionals	18	3.5%
7. Managers & senior administrators	9	1.8%
8. Clerical & secretarial staff	9	1.8%

\* Percent = frequency/samples of 510

The information regarding employee recruitment and training provision across the sample is instructive. There appears to be some consistency between the recruitment challenges faced by the companies, which was reported in section 4.3.3, and the focus of training provision. Managers and senior administrators is the group nominated as most difficult to recruit, with 78% of companies who faced recruitment challenges nominating this group as the most difficult to recruit (the next highest was professionals, nominated at 20%). When it comes to training provision for individual occupations, this group does indeed receive a high frequency of training across the sample, with 75% of the firms who have provided training identifying managers and senior professionals as recipients of training.

Other occupation groups do, however, also receive high levels of training – despite not being nominated as difficult to recruit. Manual workers, for example, are not considered

particularly difficult to recruit across the sample. However, the rate at which they are identified as a group that receives training is 55%. Likewise, there is a large gap between the difficulty of recruiting technical and scientific staff (11.8%) and the level of training they receive (77.71%).

There are a number of reasons that might explain why these occupational groups receive high levels of training despite the relative ease of their recruitment. Although manual workers and technical staff are not difficult to recruit, their value to the company in performing skilled tasks, which might often be company specific, is quite high. The relatively high levels of training they receive might reflect this. For example, such training might be for the purposes of updating skills, keeping technical knowledge consistent with best practice and the ability to effectively use new capital equipment.

Finally, the data presented above also generates some insights about the specific type of training that each occupational group receives. Managers and administrators, professionals, technical and scientific staff and clerical and secretarial staff all receive high levels of training. Indeed, Table 4.14 demonstrates they are the four groups in receipt of the highest levels of training. However, nearly all of the training these groups receive is off the job.

A number of other occupational groups appear to receive all their training on the job. Craft and skilled workers, manual workers and personal services and sales staff are nominated at a rate of at least 30% as in receipt of on-the-job training. In contrast, the same occupational groups discussed above as receiving the most amount of training overall (managers and administrators, professionals, technical and scientific staff and clerical and secretarial staff) were nominated as recipients of on-the-job training at a very low rate of less than 4%.

Overall, therefore, the sample presents an industry wherein training provision is somewhat divided across occupational lines. The next sections will present the results of testing the first set of hypotheses: the posited relationships between company size and training provision.

#### 4.4 Company size and training practices

This section presents the results of the empirical tests aimed at understanding the effect of company size on training practices within the construction industry. The term *training practices* is interpreted broadly to include both the actual provision of training and attitudes of managers towards the provision of training. Therefore, this section will include tests and results of the actual training provision, in terms of both the general incidence of training and specific occupational training. Accordingly the section is divided into two: (1) company size and training provision and (2) company size and the attitudes of managers towards training.

## 4.4.1 Company size and training provision

The first four hypotheses all address the relationship between company size and training provision. The first two of these hypotheses address the relationship between size and provision more broadly, while the second two pinpoint relationships between company size and the provision of training of a specific type.

To assess which sized companies had arranged or funded training over the preceding, the analysis begins with a cross-tabulation between company size and training provision over the preceding 12 months. The results show that 61% of the sample companies had arranged or funded training over this time period. As can be observed in Table 4.18, all four company sizes have a large number of respondents who have provided training, in some form, over the past 12 months. This would seem to affirm the first hypothesis, i.e. that companies of all sizes provide training to some extent.

There is also some support for the second hypothesis, i.e. that company size is positively associated with the decision to invest in training. This hypothesis is tested below in two stages. To begin, we can observe some marginal increase in the percentage of companies that use training as company size increases. Specifically, 47% of super small companies use training, and this jumps to 73.2% of the small companies in the sample. However, this apparent increase in training provision is not consistent as the company size increases. In fact, the next biggest company size (medium) demonstrates a 60% use of

training higher than super small, but slightly lower than the medium-sized companies. The largest category of company registers a 63% use of training in the past 12 months, higher than medium but again smaller than the small-sized companies.

While the percentages appear to support some positive relationship between company size and training provision, the Pearson chi-square test is applied to check that there is in fact some relationship between the two variables of interest: size and training. The results in the second part of Table 4.18 demonstrate that there is indeed some relationship between company size and employee training provision, and the Pearson chi-square test returns a value of 0.00, comfortably lower than the 0.05 critical value that is being applied.

-	Companies had arranged or funded training over the preceding 12 monthsSuper small		Company sizes			
			Small	Medium	Large	
No	Count	63	38	50	45	
	% within row	32.1%	19.4%	25.5%	23.0%	
	% within column	52.1%	26.8%	40.0%	36.9%	
Yes	Count	58	104	75	77	
	% within row	18.5%	33.1%	23.9%	24.5%	
	% within column	47.9%	73.2%	60.0%	63.1%	
Total	Count	121	142	125	122	
	% within row	23.7%	27.8%	24.5%	23.9%	

Table 4.18: Relationship between company size and employee training provision

## **Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.934 <sup>a</sup>	3	.000
Likelihood Ratio	18.071	3	.000
Linear-by-Linear Association	2.305	1	.129
N of valid cases	510		

a. Nil cells (.0%) have an expected count less than 5. The minimum expected count is 46.50.

To check whether there are significant differences between company sizes in providing employee training, the chi-square test was processed again, this time focusing only on those companies within each group that did provide training over the previous year. Once again the test confirmed the alternative hypothesis to the null, i.e. that there exists some significant relationship between provision of training and company size. Table 4.19 presents these results, with the relevant P value at the level of 0.003, which is comfortably lower than the 95% significance level of 0.05. Therefore, there is some statistical evidence that the size of the company does have an impact on the provision of training. However, rather than fully supporting the hypothesis that provision of training will increase with increases in company size, a more measured argument seems appropriate: very small companies (in this case super small companies) will likely provide less training than those in the larger categories.

Company size	Observed N	Expected N	Residual
Super small	58	78.5	-20.5
Small	104	78.5	25.5
Medium	75	78.5	-3.5
Large	77	78.5	-1.5
Total	314		

 Table 4.19: Relationship between company size and employee training provision

 Chi-Square test frequencies

	Company size
Chi-Square	13.822 <sup>a</sup>
Df	3
Asymp. Sig.	.003

a. Nil cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 78.5.

As explained in the previous chapter, where some of the methodological details regarding the survey are outlined, respondents were asked to circle the codes of those occupations that correspond with the training types that their companies have applied. The off-the-job training type includes off-the-job training that can occur onsite, as well as training that can take place offsite. Training methods within this type of training include lectures, group discussions, role play, sensitivity training, video tapes, simulations, case study, computer software, internet teaching, training at school or

workshops. In contrast, the on-the-job training type includes job rotation, apprenticeships and assigning trainees as members of taskforces.

The responses to the training type questions relate directly to hypotheses H3 and H4. In particular, hypothesis H3 contends that larger companies are more likely to provide off-the-job (or formal) training to employees than smaller companies. The size and training relationship posited in hypothesis H4 runs in the opposite direction: smaller companies are more likely to provide on-the-job (or informal) training than large companies.

In order to test these hypotheses regarding the relationship between company size and training type, once again the analysis begins with summary statistics in the form of a cross-tabulation between the categories of company size and the incidence of training. The off-the-job training type is considered in Table 4.20. Similarly, Table 4.21 presents a cross-tabulation between the categories of company size and the on-the-job training type. Table 4.22 presents data on companies that provide both off-the-job training and on-the-job training.

The results presented in Table 4.20 show that nearly 60% of companies have provided off-the-job training. In terms of the percentages of each individual size grouping, the category of super small companies once again provided the lowest form of this training type, while the category of small provided the highest form of this training. The two larger categories of companies demonstrate provision of this type of training at a rate higher than the super small companies, but lower than the small.<sup>3</sup> To some extent these results in regard to the off-the-job training type mirror the more general results outlined above (see Table 4.18). However, the tendency for this training type to increase as the company size increases is even weaker in these results than demonstrated in the more general category.

The results of the chi-square test, which searches for evidence of some relationship between the two categories, demonstrates statistical support for the contention that company size does matter. The p value of 0.004 is, once again, comfortably below 0.05.

<sup>&</sup>lt;sup>3</sup>The results also show that companies that provide off-the-job training are 45.5% for super small companies, 66.9% for small companies, 60.8% for medium companies and 61.5% for large companies.

However, as emphasised above, it is difficult to argue that this set of results presents convincing support for the claim that larger companies will use this type of training more than small. As the table shows, nearly 70% of small companies provided off-the-job training.

Rather than fully supporting hypotheses H3 (that company size is positively associated with this type of training), once again the results seems to emphasise the tendency for super small companies to provide less off-the-job training than the larger categories of company.

Applied off	-the-job training	Super small	Small	Medium	Large	Total
No	Count	66	47	49	47	209
	% within column	54.5%	33.1%	39.2%	38.5%	41.0%
Yes	Count	55	95	76	75	301
	% within column	45.5%	66.9%	60.8%	61.5%	59.0%
Total	Count	121	142	125	122	510
	% within column	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.20: Relationship between company size and off-the job training

## **Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.321 <sup>a</sup>	3	.004
Likelihood Ratio	13.226	3	.004
Linear-by-Linear Association	4.081	1	.043
<i>N</i> of valid cases	510		

a. Nil cells (.0%) have expected count less than 5. The minimum expected count is 49.59.

The tests of hypothesis H4 also focus on the incidence of training in relation to company size, but in this case smaller companies are thought to use on-the-job training more than their larger counterparts. While the results are interesting, they do not support the hypothesis.

Table 4.21 demonstrates that about one-third of the companies in the sample have provided on-the-job training in the past 12 months. This is significantly less than the proportion of companies that provided off-the-job training in the same period (see Table 4.21). Furthermore, the results do not support any clear relationships between company size and the on-the-job training type. The percentage of companies in each category that provide this type of training actually rises as the company size increases, up to the category of medium-sized company, i.e. super small is less than small, small is less than medium. This observation contradicts hypothesis H4 that suggest the relationship should work in the other direction.

Furthermore, the chi-square test is not significant in this case. The p value of 0.407 is far above the critical value of 0.05. Therefore, there is not any statistical evidence to suggest the various categories of company size have any relationship with the provision of on-the-job training. Given this failure to reject the standard null hypothesis of independence between the two variables of interest (company size and on-the-job training provision), no claim can be made about the relationship between them (as evidenced in this sample).

	Applied		Total			
On-t	he-Job Training	Super small	Small	Medium	Large	1000
No	Count	78	86	68	76	308
	% within column	64.5%	60.6%	54.4%	62.3%	60.4%
Yes	Count	43	56	57	46	202
	% within column	35.5%	39.4%	45.6%	37.7%	39.6%
Total	Count	121	142	125	122	510
	% within column	100.0%	100.0%	100.0%	100.0%	100.0%

 Table 4.21: Relationship between company size and on-the job training

## **Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.901 <sup>a</sup>	3	.407
Likelihood Ratio	2.886	3	.410
Linear-by-Linear Association	.411	1	.521
N of valid cases	510		

a. Nil cells (.0%) have expected count less than 5. The minimum expected count is 47.93.

funning und on the job trunning,							
Provided both training		Total					
types	Super small	Super small Small Medium Large					
Count	40	51	57	45	193		
% within row	20.7%	26.4%	29.5%	23.3%	100.0%		

Table 4.22: Companies that provide both employee training types (off-the job-<br/>training and on-the-job training)

Overall, the results of this section suggest that, in terms of the provision of training to employees, size does indeed matter. All categories of companies within the construction industry – super small, small, medium and large – provide training to some extent. However, support for the general hypothesis that the incidence of training provision has a positive relationship to company size is limited. In fact, the results support a modified contention that the size of the company is a factor primarily at the smaller end of the spectrum, i.e. the very small companies are those who are less likely to provide training to employees, particularly off-the-job training. Given the likely budget constraints of smaller companies, this is perhaps not so surprising, a point which is discussed further in the next chapter.

It was further discovered that off-the-job training is provided at a higher rate than onthe-job training. Furthermore, this second category of training demonstrates no statistically significant relationship to company size. The effects of company size on training provision, therefore, appear to be driven by relatively high levels of off-the-job training among companies that are small, medium and large, while the super small companies demonstrate significantly less provision of this form of training.

The next section maintains focus on the effect of company size but turns attention to the relationship between company size and the attitudes of managers towards training.

## 4.4.2 Company size and attitudes of managers towards training

The relationship between company size and the attitudes of managers towards training is the subject of hypotheses H8, H9, and H10. These hypotheses are broadly consistent with those relating company size to training provision. Hypothesis H8 expects the attitude of managers among large companies to be more positive towards training than small companies. Furthermore, the contention of hypothesis H9 is that the management of larger companies will demonstrate a more favourable attitude towards off-the-job training than that exhibited by smaller companies. Finally, hypothesis H10 contends that in relation to on-the-job training, the effect of company size runs the other way: the management of smaller companies will be more favourably disposed to this form of training than managers in large companies.

The results presented here will begin with an overview of the attitudes of managers, as outlined in Table 4.23. The survey asked the company manager to respond to a series of questions with a 5-point Likert scale, with 5 representing the most agreeable response to the statement and 1 indicating strong disagreement. Table 4.23 presents the mean average response to the questions for each size category of company. The responses are split into attitudes towards on-the-job training and off-the-job training.

In terms of the average attitudes of management towards training, strong support for hypothesis H9 cannot be observed. The results indicate that there are positive attitudes towards off-the-job employee training. Furthermore, in terms of company size, the results indicate that positive attitudes are largest among large companies (mean: 3.58), followed by medium-sized companies (mean: 3.55). However, super small companies (mean: 3.51) demonstrate more positive attitudes than small companies (mean: 3.47). While there is some increase in positive attitudes among larger companies, the differences between the means are marginal. Therefore, further analysis needs to be completed, in the form of ANOVA applications below.

The results suggest there are positive attitudes towards on-the-job employee training. Once again, however, the results do not support hypothesis H10, which posits that smaller companies will demonstrate more favourable attitudes towards on-the-job training than larger ones. In fact, it is medium and larger companies that demonstrate the most favourable attitudes among managers for on-the-job training (means of 4.27 and 4.23 respectively). Furthermore, the differences between all groups in terms of mean attitudes are once again very small, so further analysis needs to be completed. Overall, mean attitudes do not suggest a significant relationship between company size and attitude towards training. The larger companies (medium and large) tend to have a more favourable attitude towards training than the smaller ones (small and super small). This difference is, however, somewhat marginal. Below, the analysis now focuses on the specific questions in the survey in an attempt to discern any significant differences in attitudes across the groups, and if there is, which of those groups are indeed different.

			Mean (On-the-job training)				Mean (Off-the-job training)			
Code	Statements	1 Super small	2 Small	3 Medium	4 Large		1 Super small	2 Small	3 Medium	4 Large
Q9a_1	1)contributing to improve <b>productivity</b> of my company	4.07	3.98	3.98	4.02	Q9b_1	3.92	3.86	3.90	4.01
Q9a_2	2)improving employee performance	4.05	4.05	4.00	4.16	Q9b_2	3.99	3.92	3.98	4.14
Q9a_3	3)helping my company to achieve its strategic aims	3.98	3.87	3.98	4.11	Q9b_3	3.79	3.75	3.89	4.03
Q9a_4	4)increasing sustainable competitive advantages	3.74	3.75	3.86	3.85	Q9b_4	3.76	3.74	3.92	3.89
Q9a_5	5)the most effective way to increase <b>employee skills</b>	3.69	3.77	3.74	3.70	Q9b_5	3.74	3.68	3.88	3.84
Q9a_6	6)the most appropriate training <b>approach for my</b> <b>company</b>	3.71	3.69	3.74	3.56	Q9b_6	3.45	3.51	3.63	3.57
Q9a_7	7)achieving greater return on training investment	3.63	3.64	3.85	3.77	Q9b_7	3.70	3.48	3.77	3.8
Q9a_8	8)to build the company specific human resources	3.72	3.67	3.88	3.84	Q9b_8	3.36	3.46	3.41	3.53
Q9a_9	9)increasing <b>positive attitudes</b> of employees such as job satisfaction of employee, commitment	3.90	3.95	3.97	4.02	Q9b_9	3.73	3.81	3.83	3.93
Q9a_10	10)waste of <b>money</b>	1.69	1.68	1.78	1.69	Q9b_10	1.90	1.98	1.66	1.79
Q9a_11	11)encouraging staff turnover	1.64	1.57	1.78	1.64	Q9b_11	1.72	1.65	1.63	1.57
Q9a_12	12) the needs for <b>innovation</b>	4.10	4.1	4.23	4.16	Q9b_12	4.25	4.18	4.32	4.20
Q9a_13	13) to meet <b>business changes</b>	4.13	4.06	4.22	4.06	Q9b_13	4.29	4.13	4.29	4.20
	Mean on statements	4.19	4.16	4.27	4.23		3.51	3.47	3.55	3.58
	Mean on training type		4	4.21					3.53	

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Table 4.73• Attitudes o	t managers different sized	companies towards	employee training types
Table 7.23. Autuulo U	i managers unitrent size	companies towarus	chiployee training types

ANOVA produces an analysis of variance that seeks the statistically significant differences between the variance of the groups. The critical value indicating some statistical significance level of significance is 0.05. A value of lower than 0.05 represents some statistical support for the hypothesis that there is indeed some difference between at least some of the groups, e.g. there are some significant differences between groups one, two, three and four. Furthermore, the Tukey HSD test narrows this focus by identifying the specific groups that are indeed statistically different from each other. In other words, the Tukey HSD conducts further pair-wise comparisons to search for differences between specific pairs of groups, e.g., group one versus group two. It should be noted that the Tukey HSD test is more conservative that the ANOVA analysis, which means that it is possible to obtain a result that does not identify a significant difference between any pair-wise combinations of the groups, despite the fact that ANOVA has itself suggested there is some significant difference between at least some of the groups.

The results of this analysis of individual statements and management responses are certainly mixed. In a number of cases the ANOVA analysis demonstrates significant differences between groups and the Tukey post-hoc analysis highlights the specific groups that are different. To be precise, seven of the thirteen statements provoked significantly different responses among groups of different sizes. In most cases this relates to attitudes towards off-the-job training. However, there are a number of statements (six out of the thirteen) which do not demonstrate any significant statistical difference in the attitudes of managers across companies of differing sizes. These results are reported in Table 4.24 and Table 4.25 and briefly explained below. The individual table of results for each specific statement is placed in Appendix E.

The first nine statements reflected positive interpretations of the effect of training. Of these nine, there were at least some statistically significant differences between groups with respect to the attitudes of managers towards training. The statements that demonstrated at least some statistically significant differences are identified below, with the relevant training type, and relevant group's size nominated in each case.

These statements suggest training has the following impacts:

- <u>Improve employee performance</u>.
  - Off the job:
    - Large companies significantly different (more positive) than small companies.
- <u>Help achieve strategic aims</u>.
  - Off the job:
    - Large companies significantly different (more positive) than small companies.
    - Large companies significantly different (more positive) than super small companies.
  - On the job:
    - Large companies significantly different (more positive) than small companies.
- <u>Increase sustainable competitive advantages</u>.
  - Off the job:
    - No pair-wise combination significantly different.<sup>4</sup>
- <u>The most effective way to increase employee skills</u>.
  - Off the job
    - No pair-wise combination significantly different (although the difference between medium companies and small companies is very close to significance).
- Obtain greater return on training investment.
  - Off the job:
    - Large companies significantly different (more positive) than small companies.

<sup>&</sup>lt;sup>4</sup>This is one example where the ANOVA test identified some significant difference between the groups, but the post-hoc Tukey tests could not find statistically significant differences between any pair-wise combination. As discussed in relation to the methodology of this analysis, this stems from the fact that Tukey is a more conservative test than the initial ANOVA.

- Super small companies significantly different (more positive) than small companies.
- Medium companies significantly different (more positive) than small companies.
- On the job:
  - Medium companies significantly different (more positive) than super small companies.
  - Medium companies significantly different (more positive) than small companies.
- Build company specific human resources
  - On the job:
    - Medium companies statistically different (more positive) than small companies.

In all but one case it was a larger company that positively differed from a smaller one, e.g., a medium-sized company was statistically more positively disposed towards training than a smaller-sized company. Therefore, these results can be interpreted as generating at least some partial support for those hypotheses that suggested larger companies would have a more favourable attitude towards training than smaller companies, particularly in the case of training that is off the job. The strongest response was for the statement regarding the return earned on investment in training, where off-the-job training demonstrated differences in attitude among three of the four possible pair-wise combinations. However, even in this case some caution must be exercised: one of these pair-wise combinations runs in the opposite direction to the hypothesis, as super small companies demonstrate a more positive attitude towards off the job training than medium-sized companies.

On the other hand, none of the results offer support for those hypotheses that suggested smaller companies view on-the-job training more positively than larger ones. In those cases where there were statistically significant differences between groups in their attitude towards on-the-job training, it was in those cases where larger companies had a more positive attitude towards training than smaller ones.

The ANOVA tests also revealed there is no statistically significant relationship between company size and the attitudes of managers towards training, with reference to a number of the statements presented in the survey questionnaire. In particular, the survey questionnaire statements that addressed the following issues did not reveal any statistically significant relationships.

Statement suggests training has the following impact:

- <u>Contributes to improving the productivity of my company.</u>
- <u>The most appropriate training approach for my company.</u>
- Increase the positive attitudes of employees.

In terms of the relevant hypotheses, the empirical tests of the attitudes of managers and company size do not give strong support for the hypotheses. While there appears to be some moderate support for the positive relationship between company size and off-the-job training (hypothesis H9), the same cannot be said for the posited relationship between company size and on-the-job training (hypothesis H10), that smaller companies are likely to be more positively disposed towards on-the-job training.

Overall, this empirical testing of the relationship between company size and training practices has unearthed some support for the posited hypotheses in the Ho Chi Minh City construction industry. It does appear that company size can have some impact on the training practices of companies. The majority of the effect seems to be, however, at the lower end of the spectrum with respect to company size. It is very small companies that are less likely to provide employee training, rather than larger companies being more likely as they increase in size. This is particularly true in terms of off-the-job training and less obvious with regard to on-the-job training provision. The attitudes of managers towards training reflect these trends to some extent, and in some instances managers in comparatively larger companies responded more positively to statements about the value of training than managers in comparatively smaller companies.

again, this trend is slightly stronger with respect to off-the-job training than on-the-job. Some tentative explanations have been proposed for these results, particularly in relation to very small companies not having the budget to pursue investment in training to the extent demonstrated by their larger counterparts. However, a more detailed discussion of these results will be presented in Chapter 5. The next section turns to analysis of the effect of company ownership type on training practices in the construction industry.

Sun	mary of the results of the one-way analysis of va	riance (A	ANOVA	) (with α lev	vel = 0.05	5)	Ν	Iultip	le comparis	son	
			Mean					Tukey HSD			
Code	Statements		On-the-J	ob Training	;) 	Sia			Moon		
Code	Statements	1 Super small	2 Small	3 Medium	4 Large	Sig	(I) Q3	(J) Q3	Mean differenc e (I–J)		
Q9a_1	1)contributing to improve <b>productivity</b> of my company	4.07	3.98	3.98	4.02	.430					
Q9a_2	2)improving employee performance	4.05	4.05	4.00	4.16	.100					
Q9a_3	3)helping my company to achieve its <b>strategic</b> <b>aims</b>	3.98	3.87	3.98	4.11	.020	(4)	(2)	.233*	.009	
Q9a_4	4)increasing sustainable competitive advantages	3.74	3.75	3.86	3.85	.251					
Q9a_5	5)the most effective way to increase <b>employee</b> skills	3.69	3.77	3.74	3.70	.817					
Q9a_6	6)the most appropriate training <b>approach for my company</b>	3.71	3.69	3.74	3.56	.199					
	7)achieving greater <b>return on training</b>	3.63	3.64	3.85	3.77	.004	(3)	(1)	.220*	.013	
Q9a_7	investment						(3)	(2)	.207*	.016	
Q9a_8	8)to build the company <b>specific human resources</b>	3.72	3.67	3.88	3.84	.006	(3)	(2)	.211*	.010	
Q9a_9	9)increasing <b>positive attitudes</b> of employees such as job satisfaction of employee, commitment	3.90	3.95	3.97	4.02	.396					
Q9a_10	10)waste of <b>money</b>	1.69	1.68	1.78	1.69	.628					
Q9a_11	11)encouraging staff turnover	1.64	1.57	1.78	1.64	.114					
Q9a_12	12) the needs for <b>innovation</b>	4.10	4.1	4.23	4.16	.438					
Q9a_13	13) to meet <b>business changes</b>	4.13	4.06	4.22	4.06	.312					
	Mean on statements	4.19	4.16	4.27	4.23						
* 171	Mean on training type		4	4.21							

Table 4.24: Attitudes of managers of different sized companies towards on-the-job training (post-hoc tests)

\* The mean difference is significant at the 0.05 level.

Sum	mary of the results of the one-way analysis of	variance	(ANOVA	A) (with α l	evel = 0.	05)	Multiple Comparison			on
				lean		C.	<b>Tukey HSD</b>			<i>.</i>
Code	Statements		Off-the-Jo	o <mark>b Trainin</mark> g)		Sig.			Maaa	Sig.
Code	Statements	1 Super Small	2 Small	3 Medium	4 Large		(I) Q3	(J) Q3	Mean difference (I–J)	
Q9b_1	1)contributing to improve <b>productivity</b> of my company	3.92	3.86	3.90	4.01	.219				
Q9b_2	2)improving employee performance	3.99	3.92	3.98	4.14	.002	(4)	(2)	.230*	.001
Q9b_3	3)helping my company to achieve its <b>strategic</b> <b>aims</b>	3.79	3.75	3.89	4.03	.000	(4) (4)	(1) (2)	.224 <sup>*</sup> .299 <sup>*</sup>	.017
Q9b_4	4)increasing sustainable competitive advantages	3.76	3.74	3.92	3.89	.037				>.05
Q9b_5	5)the most effective way to increase <b>employee</b> skills	3.74	3.68	3.88	3.84	.038				>.05
Q9b_6	6)the most appropriate training <b>approach for</b> <b>my company</b>	3.45	3.51	3.63	3.57	.327				
Q9b_7	7)achieving greater <b>return on training</b> <b>investment</b>	3.70	3.48	3.77	3.8	.000	(1) (3) (4)	(2) (2) (2)	.233* .292* .328*	.009 .000 .000
Q9b_8	8)to build the company <b>specific human</b> resources	3.36	3.46	3.41	3.53	.180				
Q9b_9	9)increasing <b>positive attitudes</b> of employees such as job satisfaction of employee, commitment	3.73	3.81	3.83	3.93	.169				
Q9b_10	10)waste of <b>money</b>	1.90	1.98	1.66	1.79	.025	(2)	(3)	.323*	.020
Q9b_11	11)encouraging staff turnover	1.72	1.65	1.63	1.57	.470				
Q9b_12	12) the needs for <b>innovation</b>	4.25	4.18	4.32	4.20	.305				
Q9b_13	13) to meet <b>business changes</b>	4.29	4.13	4.29	4.20	.186				
	Mean on statements	3.51	3.47	3.55	3.58					
	Mean on training type		3	.53						

Table 4.25: Attitudes of managers of different sized	companies towards off-the-job training (post-hoc tests)
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\* The mean difference is significant at the 0.05 level.

#### 4.5 Company ownership types and training practices

This section presents the results of the empirical tests aimed at understanding the effect of company ownership type on training practices within the construction industry. These findings are relevant to hypotheses H5 to H7, and H11 to H13. As with section 4.4 above, the term *training practices* is interpreted broadly to include both actual provision and basic attitudes of managers towards the provision of training. Like the previous empirical analysis described above, this section will include tests and results of the general incidence of training (both off-the-job and on-the-job) in addition to the analysis of the attitudes of managers towards training. The section is once more divided into two clear sections, focusing first on company ownership type and training provision and second, company ownership type and the attitudes of managers.

## 4.5.1 Company ownership type and training provision

Hypotheses H5 to H7 focus on the relationship between company ownership type and the provision of training. In particular, the hypotheses contend that training provision is of greater incidence among FDI companies than those that are locally owned private companies, and that joint-stock companies will also provide more training than these local private companies. Similarly, it is also contended that state-owned companies will provide more training than locally owned private companies.

To test these hypotheses, and assess which form of companies had arranged or funded training over the preceding 12-month period, the analysis begins with a cross-tabulation between the company ownership type and training provision. Table 4.26 shows that 61% of the sample companies had indeed arranged or funded training over this time period. In terms of the specific categories of ownership, hypothesis H5 is supported, as 86% of FDI companies provide training, which is greater than the 35.7% provided by local private companies. Likewise, hypothesis H6 appears to be supported as joint-stock companies provide more training (56.1%) than local private companies. Similarly, hypothesis H7 appears to be supported with 68% of state-owned companies providing training.

Commonies th	of owner and on funded	Co	р			
-	at arranged or funded the preceding 12 months	State- owned	Private FDI		Joint- stock	Total
Yes	Count	85	45	110	74	314
	% within column	68.0%	35.7%	86.6%	56.1%	61.6%
	% of Total	16.7%	8.8%	21.6%	14.5%	61.6%
No	Count	40	81	17	58	196
	% within column	32.0%	64.3%	13.4%	43.9%	38.4%
	% of Total	7.8%	15.9%	3.3%	11.4%	38.4%
Total	Count	125	126	127	132	510
	% within column	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	24.5%	24.7%	24.9%	25.9%	100.0%

## Table 4.26: Company ownership and training provision

## **Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	73.141 <sup>a</sup>	3	.000
Likelihood Ratio	77.464	3	.000
Linear-by-Linear Association	1.139	1	.286
N of valid cases	510		

a. Nil cells (.0%) have expected count less than 5. The minimum expected count is 48.04.

While the percentages outlined in Table 4.26 appear to offer support for the hypothesised relationships between company forms and training provision, the Pearson chi-square test is again applied to check that there is in fact some relationship between the two variables of interest: company ownership type and training provision. The second section of Table 4.26 demonstrates that there is indeed some relationship between company size and employee training provision; and the Pearson chi-square test returns a value of 0.00, comfortably lower than the 0.05 critical value.

It should be noted that the Pearson chi-square test for independence is precisely that: a test aimed at validating the hypothesis that there is some relationship between the categories (company ownership type) and the respective counts (the provision of training). Therefore, it does not offer support for the details of the particular hypothesised relationship. However, given that the relative magnitudes of training

provision among companies of different ownership type do indeed follow the hypothesised relationships, and that the Pearson chi-square test confirms that some statistically significant correlation does indeed exist, these results do offer some support for hypotheses H5 through H7: FDI, state-owned and joint-stock companies provide more training than local private companies.

Although the hypotheses do not address the possibility of a relationship between company ownership type and training type (off-the-job or on-the-job), it is useful to examine the comparative percentages and apply the Pearson chi-square test for independence for these two primary training types. Tables 4.27 and 4.28 present these results. Based on these results, a number of observations can be made in relation to the provision of the two training types. Table 4.29 presents results for companies which provided both off-the-job training and on-the-job training. First, in the case of both offthe-job training and on-the-job training, the relative incidence of training provision follows the same pattern among the various ownership forms of the companies. In both cases, FDI and joint-stock companies demonstrate a higher incidence of training than local private companies, and in both cases state-owned companies also provide more training than local private companies. This is, once again, consistent with the relevant hypotheses H5 through H7. Furthermore, statistical significance is established for both categories, i.e. the Pearson chi-square test for independence proves there to be a statistically significant relationship between the categories of ownership form and the provision of off-the-job training, and also between the categories of ownership form and the provision of on-the-job training.

Second, the actual counts and percentages of training provision are higher for off-the-job training than they are for the provision of on-the-job training. For example, 70 (53%) of the joint-stock companies in the sample provide on-the-job training, while only 44 (33.3%) of the same companies provide on-the-job training. Similarly, 85 (68%) of the state-owned companies in the sample provide on-the-job training, while only 49 (39.2%) of the same companies provide on-the-job training. This lower incidence of on-the-job training provision exists in the case of both the other two categories of companies (private companies and FDI companies). This suggests that although companies of all

ownership types provide training, there is a greater provision of training that is off-thejob training among all these categories of companies. These findings are consistent with the observation of earlier reporting that the majority of training provision among companies of different sizes was off-the-job as opposed to on-the-job training.

Overall, it can be argued that these results establish relatively strong support for the relevant hypotheses regarding the relationship between ownership type and training provision. In fact, it could be argued that these findings generate stronger support for the relationship between ownership form and training provision than that established between company size and training provision. Although in both cases the Pearson's chi-square test for independence was significant in supporting the claim that there exists some relationship between the categories and training provision, the relative magnitudes of company ownership type are much closer aligned with the relationships posited by the hypotheses (than are the magnitudes of company size). Furthermore, the Pearson's chi-square test for independence established a statistically significant relationship between ownership form and both forms of training (off the job and on the job). This was not the case in testing the relationship between company size and training type, wherein the relationship was not statistically significant.

The next section reports the results of tests on the relationship between company ownership type and managers' attitudes towards training.

Amplied of	the ich training	Co	ompany ow	nership	Č.	Tatal
Applied of	the-job training	State-owned	Private	FDI	Joint-stock	Total
No	Count	40	88	19	62	209
	% within row	19.1%	42.1%	9.1%	29.7%	100.0%
	% within column	32.0%	69.8%	15.0%	47.0%	41.0%
	% of Total	7.8%	17.3%	3.7%	12.2%	41.0%
Yes	Count	85	38	108	70	301
	% within row	28.2%	12.6%	35.9%	23.3%	100.0%
	% within column	68.0%	30.2%	85.0%	53.0%	59.0%
	% of Total	16.7%	7.5%	21.2%	13.7%	59.0%
Total	Count	125	126	127	132	510
	% within row	24.5%	24.7%	24.9%	25.9%	100.0%
	% within column	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	24.5%	24.7%	24.9%	25.9%	100.0%

Table 4.27: The relationship between company ownership and off-the-job training

# **Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	85.068 <sup>a</sup>	3	.000
Likelihood Ratio	89.630	3	.000
Linear-by-Linear Association	.747	1	.387
N of valid cases	510		

a. Nil cells (.0%) have expected count less than 5. The minimum expected count is 51.23.

-		С	ompany o	wnershi	р	
Applied on	-the-job training	State- owned	Private	FDI	Joint-stock	Total
No	Count	76	107	37	88	308
	% within row	24.7%	34.7%	12.0%	28.6%	100.0%
	% within column	60.8%	84.9%	29.1%	66.7%	60.4%
	% of Total	14.9%	21.0%	7.3%	17.3%	60.4%
Yes	Count	49	19	90	44	202
	% within row	24.3%	9.4%	44.6%	21.8%	100.0%
	% within column	39.2%	15.1%	70.9%	33.3%	39.6%
	% of Total	9.6%	3.7%	17.6%	8.6%	39.6%
Total	Count	125	126	127	132	510
	% within row	24.5%	24.7%	24.9%	25.9%	100.0%
	% within column	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	24.5%	24.7%	24.9%	25.9%	100.0%

Table 4.28: The relationship between company ownership and on-the-job training

# **Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	85.750 <sup>a</sup>	3	.000
Likelihood Ratio	89.250	3	.000
Linear-by-Linear Association	4.379	1	.036
<i>N</i> of valid cases	510		

a. Nil cells (.0%) have expected count less than 5. The minimum expected count is 49.51.

# Table 4.29: Companies that provide both training types (off-the-job training and on-the-job training)

Applied both training	Co	)	Total		
types	State-owned	Private	FDI	Joint-stock	I Utal
Count	49	15	89	40	193
% within row	25.4%	7.8%	46.1%	20.7%	100.0%

#### 4.5.2 Company ownership type and attitudes of managers towards training

In the case of company ownership type and the attitudes of managers towards training, the relevant hypotheses (H11 to H13) follow the pattern suggested by the earlier hypotheses regarding ownership type and training provision: Managers in FDI companies, state-owned companies and joint-stock companies will each have more positive attitudes towards training investment than that demonstrated by managers in local private companies.

Analysis of the results is conducted as an overview of the attitudes of managers towards training investment, across the four ownership types. The survey instrument is the same as that analysed in section 4.4.2: a 5-point Likert scale, with 5 representing the most agreeable response to the statement, and 1 indicating strong disagreement. Table 4.30 presents the mean response to the questions for each company ownership form. Once again, the responses are split into attitudes towards on-the-job training and off-the-job training.

The average attitudes of management towards training do offer some support for the relevant hypotheses (H11 to H13). Taken together, the hypotheses suggest that the attitudes of managers towards training investment at state-owned, FDI, and joint-stock companies should all be higher than those demonstrated by privately owned domestic companies. As can be observed in the table, this does appear to be the case. Across the 9 primary statements, as they apply to the two types of training (off-the-job and on-the-job) the large majority of average responses support the hypotheses. Only 6 of the 18 statements do not present local private companies as having the least favourable management disposition towards training investment. In some cases the differences are marginal. However, it can still be argued that these average attitudes are broadly consistent with the expectations of the hypotheses.

The overall averages (average attitudes of managers across all the survey questionnaire statements), reported at the bottom of Table 4.30, do also support the contention of the hypotheses. Privately owned domestic companies do present the lowest overall average

(3.49 for on-the-job training and 3.46 for off-the-job training). However, the difference between these companies and joint-stock companies is very small (3.50 for informal training and 3.47 for off-the-job training). This suggests some, perhaps unanticipated, similarity in attitudes towards training between local private companies and joint-stock companies.

Therefore, while there does appear to be less support for training investment among managers from privately owned domestic companies, the differences in the means are once again marginal. The use of ANOVA applications is therefore warranted in an effort to learn more about the attitudes across this sample. The analysis now shifts to ANOVA tests of the specific questions in the survey questionnaire in another attempt to discern any significant differences in attitudes across the various company ownership types, and – in those cases where there is some statistically significant difference – Tukey HSD post-hoc tests are again utilised to identify which of those groups are indeed different.

		Mea	n (On-the-	job traini	ing)		Mear	ı (Off-the-j	ob train	ing)
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock	Code	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9a_1	1)contributing to improve <b>productivity</b> of my company	4.07	3.95	4.02	4.00	Q9b_1	4.00	3.80	4.00	3.88
Q9a_2	2)improving employee performance	4.14	4.03	4.04	4.04	Q9b_2	4.14	3.90	4.00	3.97
Q9a_3	3)helping my company to achieve its strategic aims	4.19	3.87	4.00	3.86	Q9b_3	3.98	3.84	3.92	3.71
Q9a_4	4)increasing sustainable competitive advantages	3.86	3.67	3.91	3.77	Q9b_4	3.90	3.71	3.94	3.75
Q9a_5	5)the most effective way to increase employee skills	3.97	3.38	3.91	3.67	Q9b_5	3.90	3.61	3.87	3.74
Q9a_6	6)the most appropriate training <b>approach for my company</b>	3.78	3.56	3.83	3.54	Q9b_6	3.79	3.10	3.86	3.43
Q9a_7	7)achieving greater <b>return on training</b> <b>investment</b>	3.67	3.59	3.87	3.74	Q9b_7	3.68	3.62	3.87	3.56
Q9a_8	8)to build the company <b>specific human</b> <b>resources</b>	3.70	3.73	3.94	3.72	Q9b_8	3.30	3.64	3.29	3.54
Q9a_9	9)increasing <b>positive attitudes</b> of employees such as job satisfaction of employee, commitment	4.01	3.84	4.07	3.92	Q9b_9	3.93	3.62	4.05	3.70
Q9a_10	10)waste of <b>money</b>	1.70	2.21	1.26	1.67	Q9b_10	1.72	2.33	1.32	1.96
Q9a_11	11)encouraging staff turnover	1.70	2.13	1.24	1.58	Q9b_11	1.72	1.99	1.24	1.63
Q9a_12	12) the needs for <b>innovation</b>	4.12	3.77	4.66	4.04	Q9b_12	4.22	3.91	4.68	4.13
Q9a_13	13) to meet <b>business changes</b>	4.14	3.67	4.65	4.01	Q9b_13	4.19	3.91	4.68	4.11
	Mean on statements	3.62	3.49	3.65	3.50		3.57	3.46	3.59	3.47
	Mean on training type		3.57					3.52	2	

 Table 4.30: Company ownerships and attitudes of managers towards training types

The results of the analysis of individual statements and management response are supportive of the hypotheses. The ANOVA demonstrates at least some significant differences between ownership groups with respect to all of the first nine statements. In fact, there is some statistical difference detected between the ownership groups in the case off-the-job training for every survey statement. Survey statements regarding on-the-job training elicit statistically different responses in all cases except the first two.

Furthermore, the Tukey post-hoc analysis detects significance between at least two specific groups in every case of ANOVA significance. In other words, whenever ANOVA detects a statistically significantly different response to the survey questionnaire statement among the four ownership types, there is also detected at least one associated difference between two specific groups (one pair-wise combination) in the Tukey HSD analysis.

These results are reported in Table 4.31 and Table 4.32 and briefly explained below. However, as with the earlier section, the individual table of results for each specific statement is placed in the appendix. The first nine statements reflected positive interpretations of the effect of training. Of these nine, in each and every case there were at least some statistically significant differences between groups with respect to the attitudes of managers towards training. Those statements are identified below, with the relevant training type and relevant ownership types nominated in each case. Due to the large number of significant results, the following additional notation is used to indicate the relationship between each individual result and the relevant hypotheses:

- (CH) = result that confirms one of the stated hypotheses
- (RH) = result that refutes one of the stated hypotheses
- (NR) = result that is not related to any of the stated hypotheses.

Statement suggests training has the following impact:

- <u>Contributes to improving the productivity of my company.</u>
  - Off-the-job:
    - State-owned companies significantly different (more positive) from local private companies. (CH)
    - FDI companies significantly different (more positive) from local private companies. (CH)
- <u>Improves employee performance</u>.
  - Off-the-job:
    - State-owned companies significantly different (more positive) from local private companies. (CH)
    - State-owned companies significantly different (more positive) from joint-stock companies. (NR)
- <u>Helps achieve strategic aims</u>.
  - o Off-the-job:
    - State-owned companies significantly different (more positive) from joint-stock companies. (NR)
    - FDI companies significantly different (more positive) from jointstock companies. (NR)
  - On-the-job:
    - State-owned companies significantly different (more positive) from local private companies. (CH)
    - State-owned companies significantly different (more positive) from joint-stock companies. (NR)
- Increases sustainable competitive advantages.
  - o Off-the-job:
    - FDI companies significantly different (more positive) from local private companies. (CH)

- On-the-job:
  - State-owned companies significantly different (more positive) from local private companies. (CH)
  - FDI companies significantly different (more positive) from local private companies. (CH)
- The most effective way to increase employee skills.
  - o Off-the-job:
    - State-owned companies significantly different (more positive) from local private companies. (CH)
    - FDI companies significantly different (more positive) from local private companies. (CH)
  - On-the-job:
    - State-owned companies significantly different (more positive) than joint-stock companies. (NR)
    - State-owned companies significantly different (more positive) from local private companies. (CH)
    - FDI companies significantly different (more positive) from local private companies. (CH)
    - Joint-stock companies significantly different (more positive) from local private companies. (CH)
- <u>The most appropriate training approach for my company.</u>
  - Off-the-job:
    - State-owned companies significantly different (more positive) from local private companies. (CH)
    - State-owned companies significantly different (more positive) from joint-stock companies. (NR)
    - Joint-stock companies significantly different (more positive) from local private companies. (CH)
    - FDI companies significantly different (more positive) from local private companies. (CH)

- FDI companies significantly different (more positive) from jointstock companies. (NR)
- On-the-job:
  - State-owned companies significantly different (more positive) than joint-stock companies. (CH)
  - FDI companies significantly different (more positive) than joint-stock companies. (NR)
  - FDI companies significantly different (more positive) from local private companies. (CH)
- Obtain a greater return on training investment.
  - Off-the-job:
    - FDI companies significantly different (more positive) from local private companies. (CH)
    - FDI companies significantly different (more positive) from jointstock companies. (NR)
  - On-the-job:
    - FDI companies significantly different (more positive) from local private companies. (CH)
    - FDI companies significantly different (more positive) from stateowned companies. (NR)
- Build company-specific human resources.
  - o Off-the-job:
    - Local private companies significantly different (more positive) from state-owned companies. (RH)
    - Local private companies significantly different (more positive) from FDI companies. (RH)
    - Joint-stock companies significantly different (more positive) from state-owned companies. (NR)
    - Joint-stock companies significantly different (more positive) from FDI companies. (NR)

- On-the-job:
  - FDI companies significantly different (more positive) from local private companies. (CH)
  - FDI companies significantly different (more positive) from stateowned companies. (NR)
  - FDI companies significantly different (more positive) from jointstock companies. (NR)
- Increase the positive attitudes of employees.
  - o Off-the-job:
    - State-owned companies significantly different (more positive) from local private companies. (CH)
    - State-owned companies significantly different (more positive) from joint-stock companies. (NR)
    - FDI companies significantly different (more positive) from local private companies. (CH)
    - FDI companies significantly different (more positive) from jointstock companies. (NR)
  - o On-the-job:
    - FDI companies significantly different (more positive) from local private companies. (CH)

There are a total of 23 individual results that are supportive of one of the hypotheses and there is at least one result for each individual statement. Only two of the individual results appear to refute any of the hypotheses. As the hypotheses contend that the management of state-owned, FDI and joint-stock companies will demonstrate more favourable attitudes towards training investment than that offered by local private companies, the weight of results confirming the hypotheses would suggest a general statement can be advanced: The management of privately owned domestic companies are likely to have less positive attitudes towards training investment than companies with other ownership types. A closer inspection of the results, however, uncovers some nuances that might lead the researcher to qualify this general statement.

In the majority of individual results that confirm one of the hypotheses, it is the categories of either state-owned or FDI companies that generate the significant outcome. The attitudes of managers in joint-stock companies on the other hand are found to be significantly larger than those exhibited by managers in local private companies in only 2 of the 23 individual results. In the two individual results that refute one of the hypotheses, managers in local private companies were significantly more positively disposed towards training than managers in state-owned companies and also FDI companies (statement 8: '...build company specific human resources.'), i.e. joint-stock companies did not demonstrate differences with local private companies. Therefore, because the managers in joint-stock companies figure in the results in so few cases, it is perhaps inappropriate to extend the general statement above to joint-stock companies. Instead, it is perhaps more accurate to argue there is actually little difference between the attitudes of managers in local private companies and joint-stock companies, based on this sample and results.

As has been noted, of the 23 individual supporting results, 2 were for joint-stock. The split between the other two company forms was 12 for FDI and 9 for state-owned. The two refuting results where by local private companies had a more positive attitude towards training were one result wherein local private companies were more positive than foreign-owned and one result wherein they were more positive than state-owned companies. Thus, it would seem that the attitudes of managers in both FDI and state-owned companies are similar in that they are more positively disposed towards training investment and rarely demonstrate the opposite relationship.

Some interesting findings are also uncovered when we consider the results that are unrelated to the posited hypotheses. Of the 16 significant results that are unrelated to the hypotheses, 12 of these results demonstrate that either state-owned or FDI companies have more positive attitudes towards training than joint-stock companies. Given that joint-stock companies featured so little in the results that support the hypotheses in relation to the less positive attitudes of managers in local private companies (it was primarily state-owned and FDI companies that demonstrated more positive attitudes than local private companies), it seems there is some further evidence that joint-stock companies are comparable to local private companies in their attitude towards training investment. In fact, we might amend the general statement proposed above to now contend that both these company ownership types (local private and joint-stock) are less likely to have this attitude towards training than the other two (state-owned and foreign-owned).

Overall, empirical testing of the relationship between company ownership types and training practice in the Ho Chi Minh City construction industry has uncovered significant support for the posited hypotheses. It does appear that the ownership form of companies is related to the training practices of companies, and that state-owned, FDI and joint-stock companies tend to provide more training than local private companies, and statistically significant differences extend to both types of training: off-the-job and on-the-job. In terms of the attitudes of managers towards training among the companies of different ownership types, it would appear there are significant differences between company ownership type, with the attitudes of managers in state-owned and FDI companies. Furthermore, there is also some evidence that the attitudes of managers in state-owned and FDI companies are more favourable than the attitudes of managers in joint-stock companies – an additional finding not anticipated by the hypotheses motivating the empirical exercises.

Su	immary results of the one-way analysis of variance (	(ANOVA	A) (with a	a level =	= 0.05)		I	Multipl	e comparisor	n
		Mea	n (On-the-j	ob traini	ng)			Tukey	HSD	
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock	Sig.	(I) Q2	(J) Q2	Mean difference (I–J)	Sig.
Q9a_1	1)contributing to improve <b>productivity</b> of my company	4.07	3.95	4.02	4.00	.360				
Q9a_2	2)improving employee performance	4.14	4.03	4.04	4.04	.231				
Q9a_3	3)helping my company to achieve its <b>strategic aims</b>	4.19	3.87	4.00	3.86	.000	(1) (1)	(2) (5)	.319* .328*	.000 .000
Q9a_4	4)increasing sustainable <b>competitive advantages</b>	3.86	3.67	3.91	3.77	.005	(1) (3.5)	(2) (2)	.189* .247*	.050 .004
	5)the most effective way to increase <b>employee</b> <b>skills</b>				3.67	.000	(1)	(2)	.587*	.000
00 5		2.07	2.20	2.01			(1)	(5)	.294*	.007
Q9a_5		3.97	3.38	3.91			(3.5)	(2)	.525*	.000
							(5)	(2)	.293*	.007
	6)the most appropriate training <b>approach for my</b>						(1)	(5)	.238*	.033
Q9a_6	company	3.78	3.56	3.83	3.54	.001	(3.5)	(2)	.279*	.009
							(3.5)	(5)	.297*	.004
Q9a_7	7)achieving greater <b>return on training</b>	3.67	3.59	3.87	3.74	.001	(3.5)	(1)	.202*	.024
	investment						(3.5) (3.5)	(2)	.287* .249*	.000
Q9a_8	8)to build the company <b>specific human</b>	3.70	3.73	3.94	3.72	.001	(3.5)	(1)	.249*	.002
Q9a_0	resources	5.70	5.75	5.94	5.72	.001	(3.5)	(5)	.225*	.005
Q9a_9	9)increasing <b>positive attitudes</b> of employees such as job satisfaction of employee, commitment	4.01	3.84	4.07	3.92	.003	(3.5)	(2)	.230*	.003
							(1)	(3.5)	.436*	.000
Q9a_10	10)waste of <b>money</b>	1.70	2.21	1.26	1.67	.000	(2)	(1)	.510*	.000
							(2)	(3.5)	.947*	.000

 Table 4.31: Company ownership type and attitudes of managers towards on-the-job training (post-hoc tests)

Su	mmary results of the one-way analysis of variance	(ANOVA	A) (with o	a level :	= 0.05)		I	Multipl	e compariso	n
		Mea	n (On-the-j	ob traini	ng)		<b>Tukey HSD</b>			
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock	Sig.	(I) Q2	(J) Q2	Mean difference (I–J)	Sig.
							(2)	(5)	.532*	.000
							(5)	(3.5)	.414*	.000
							(1)	(3.5)	.460*	.000
							(2)	(1)	.431*	.000
Q9a_11	11)encouraging staff turnover	1.70	2.13	1.24	1.58	.000	(2)	(3.5)	.891*	.000
							(2)	(5)	.551*	.000
							(5)	(3.5)	.340*	.000
							(1)	(2)	.350*	.000
							(3.5)	(1)	.541*	.000
Q9a_12	12) the needs for <b>innovation</b>	4.12	3.77	4.66	4.04	.000	(3.5)	(2)	.892*	.000
							(3.5)	(5)	.624*	.000
							(5)	(2)	.268*	.009
							(1)	(2)	.477*	.000
							(3.5)	(1)	.502*	.000
Q9a_13	13) to meet <b>business changes</b>	4.14	3.67	4.65	4.01	.000	(3.5)	(2)	.979*	.000
							(3.5)	(5)	.638*	.000
							(5)	(2)	.341*	.002
	Mean on statements	3.62	3.49	3.65	3.50					ļ
	Mean on training type		3.57	7						

 $\ast$  The mean difference is significant at the 0.05 level.

Su	mmary results of the one-way analysis of variance (	ANOVA	) (with a	level	= 0.05)		Multiple comparison			n
		Mea	n (Off-the-j	job trai	ning)			Tukey	' HSD	
Code	Statement	(1) State- Owned	(2) Private	(3.5) FDI	(5) Joint- stock	Sig.	(I) Q2	(J) Q2	Mean difference (I–J)	Sig.
Q9b_1	1)contributing to improve <b>productivity</b> of my company	4.00	3.80	4.00	3.88	.013	(1) (3.5)	(2) (2)	.198* .198*	.033 .032
Q9b_2	2)improving <b>employee performance</b>	4.14	3.90	4.00	3.97	.001	(1)	(2) (5)	.239* .174*	.001 .022
Q9b_3	3)helping my company to achieve its <b>strategic aims</b>	3.98	3.84	3.92	3.71	.003	(1) (3.5)	(5) (5)	.264*	.002 .024
Q9b_4	4)increasing sustainable <b>competitive advantages</b>	3.90	3.71	3.94	3.75	.004	(3.5)	(2)	.239*	.012
Q9b_5	5)the most effective way to increase <b>employee</b> skills	3.90	3.61	3.87	3.74	.001	(1) (3.5)	(2) (2)	.285*	.002 .006
	58115						(1)	(2)	.697*	.000
							(1)	(5)	.360*	.000
Q9b_6	6)the most appropriate training <b>approach for my</b> <b>company</b>	3.79	3.10	3.86	3.43	.000	(3.5)	(2)	.763*	.000
	company						(3.5)	(5)	.426*	.000
							(5)	(2)	.337*	.001
Q9b_7	7)achieving greater <b>return on training</b> <b>investment</b>	3.68	3.62	3.87	3.56	.000	(3.5) (3.5)	(2) (5)	.247* .306*	.006
							(2)	(1)	.344*	.000
001 0	8)to build the company <b>specific human</b>	2.20	2.64	2.20	2.54	000	(2)	(3.5)	.349*	.000
Q9b_8	resources	3.30	3.64	3.29	3.54	.000	(5)	(1)	.242*	.011
							(5)	(3.5)	.247*	.008
							(1)	(2)	.309*	.001
Q9b_9	9)increasing <b>positive attitudes</b> of employees such	3.93	3.62	4.05	3.70	.000	(1)	(5)	.223*	.027
	as job satisfaction of employee, commitment						(3.5)	(2)	.428*	.000
							(3.5)	(5)	.343*	.000
Q9b_10	10)waste of <b>money</b>	1.72	2.33	1.32	1.96	.000	(1) (2)	(3.5) (1)	.397* .613*	.001

 Table 4.32: Company ownership type and attitudes of managers towards off-the-job training (post-hoc tests)

Su	mmary results of the one-way analysis of variance (	ANOVA	) (with a	level	= 0.05)		Multiple comparison			n
		Mea	n (Off-the-j	ob trai	ning)			Tukey	<b>HSD</b>	
Code	Statement	(1) State- Owned	(2) Private	(3.5) FDI	(5) Joint- stock	Sig.	(I) Q2	(J) Q2	Mean difference (I–J)	Sig.
							(2)	(3.5)	1.010*	.000
							(2)	(5)	.371*	.002
							(5)	(3.5)	.639*	.000
							(1)	(3.5)	.476*	.000
							(2)	(1)	.272*	.006
Q9b_11	11)encouraging staff turnover	1.72	1.99	1.24	1.63	.000	(2)	(3.5)	.748*	.000
							(2)	(5)	.363*	.000
							(5)	(3.5)	.385*	.000
							(1)	(2)	.303*	.001
							(3.5)	(1)	.461*	.000
Q9b_12	12) the needs for <b>innovation</b>	4.22	3.91	4.68	4.13	.000	(3.5)	(2)	.764*	.000
							(3.5)	(5)	.548*	.000
							(5)	(2)	.216*	.038
							(1)	(2)	.279*	.005
Q9b_13	13) to meet <b>business changes</b>	4.19	3.91	4.68	4.11	.000	(3.5)	(1)	.485*	.000
Q70_15	13) to most business changes	4.17	5.91	4.00	4.11	.000	(3.5)	(2)	.764*	.000
							(3.5)	(5)	.564*	.000
	Mean on Statements	3.57	3.46	3.5	3.47					
	Mean on Training Type		3.52	2						

\* The mean difference is significant at the 0.05 level.

#### 4.6 Conclusion

In conclusion, the results reported in this chapter demonstrate some tentative support not only for the hypothesised relationships between the size of companies and training practices but also quite strong support for the hypothesised relationships between company ownership types and training practices within the Ho Chi Minh City construction industry. In the case of the former, it seems that companies that are very small are less likely to provide training than companies that are larger in size. This effect of size is extended to the attitudes of managers towards training, which seem to be less positive when the company is particularly small. In the latter case, it seems that stateowned, FDI and joint-stock companies provide training more than local private companies, and that the managers' attitudes towards training at the first two company forms (state-owned and FDI) are more positive than at privately owned, and perhaps even joint-stock, companies.

Although some tentative explanations have been offered throughout, detailed discussion and analysis of the factors driving these results still needs to be pursued. In particular, these results need to now be considered through the lens of the relevant literature, outlined in Chapter 2. The next chapter will thus reconsider the hypotheses, results and related literature together, in an effort to increase our understanding of training practices in the construction industry in Ho Chi Minh City.

## **CHAPTER 5: ANALYSIS AND DISCUSSION**

#### **5.1 Introduction**

This chapter will reconsider the research questions in the context of the quantitative results presented in Chapter 4. This discussion will involve consideration of the themes raised by the review of relevant research in Chapter 2, in an effort to explore and add to the body of knowledge highlighted in that chapter. In particular, the research questions will be addressed in conjunction with the relevant hypotheses. Each of the research questions will be considered in turn, together with their corresponding hypotheses. Where appropriate, a small table will be presented that summarises the quantitative findings of the hypotheses that are relevant to each of the individual research questions. This will allow easy navigation through the findings as they relate to each research question and the associated analytical discussion of the relevant results.

#### **5.2 Research questions**

#### 5.2.1 Analysis and discussion of research question one

The first research question is a general and open-ended question aimed at understanding basic training practices in Vietnam. As a reminder to the reader, the precise research question is the following:

• Research Question One: 'What are the employee training practices currently used in construction companies in Vietnam?'

In addressing this question, the thesis was interested in establishing the infrastructure adopted by companies to support training and the key rationales relied upon by companies to support training. There was also interest in the extent to which companies funded or arranged training in the preceding 12-month period and whether this training provision was particularly skewed towards particular occupational groups. This section of the chapter examines the infrastructure established by companies to organise training. This includes the existence of a training department and the receipt of training

subsidies and sponsorships from external parties.

This interest in training infrastructure arises from a key area of discussion within the human resource management and human resource development literature concerning the way organisations support training. One measure of this support includes the manner in which organisations conceptualise and support formalised functions, structures and budgetary allocations. For some scholars, the training function is identified as one of the functions of the human resources department of companies (Trivedi & Raval 2015).

Thus one area of assessment in the current research is the support of training evident in construction companies in Vietnam. A starting point for this assessment is whether companies have established any specific department that specialises in training for employees. The results show that more than 90% of the companies surveyed had not established a distinct and separate training department. This is not to suggest that training departments are a prerequisite to the provision of training; instead, simply that the majority of construction companies in Vietnam had not organised the provision of training through a training department.

Beyond the organisation of training functions through a department, a further question is whether companies receive direct financial support or subsidies from an external party to underpin the provision of training. In terms of funding for training in general, there is research in Vietnam which suggests that employers, especially FDI companies, consider employee training provision as an investment. Therefore, they often support and pay for employee training. This same degree of support for employee training is not strongly supported by companies with other forms of ownership structures because they do not consider training provision to be a viable investment (Truong & Le 2007). There was also the question of whether companies mobilised sponsorship from external sources such as government and non-government organisations, but these sources are not always available for training employee of companies (Huong 2013).

In terms of resources for employee training in the form of sponsorship or subsidies, the thesis results show that more than 90% of companies do not receive sponsorship or subsidies from external organisations. Less than 10% of companies received subsidies

from outside companies. According to the results, most of the companies surveyed provide employee training based mainly on their own funds, with only a small percentage provided through an external subsidy or sponsorship. Of the small number of companies that receive external support, the companies that are most likely to receive external support are state-owned companies. This type of support warrants further assessment in future research but it is most likely to be through training services offered through another instrument or agency of the state. A relevant consideration here is that the Vietnamese government is a stakeholder in the provision of training services. Another relevant issue may lie with the categorisation of government support. Rather than being evident in the form of specific sponsorships or subsidies, this support may be evident in the form of short courses accessible to the construction industry. The Vietnamese government frequently provides short training courses for construction companies. These are widely publicised with construction companies encouraged to utilise them. These courses are particularly relevant to state-owned construction companies. These companies are required to assign staff to attend the courses to meet the requirements of new regulations such as standards in design and labour safety (Hop 2014; TM 2014).

This thesis also assessed whether Vietnamese construction companies face difficulties in recruiting skilled labour from the labour market. The results presented in Chapter 4 showed that nearly half of the construction companies indicated that they have faced difficulties in recruiting labour.

The results presented in Chapter 4 also indicated that companies faced recruitment difficulties in particular areas. In addition, the results showed that construction companies faced significant difficulties in recruiting managers and senior administrators. In comparison, less than one in five construction companies faced difficulties in recruiting craft and skilled operational staff, clerical and secretarial staff, other manual workers, operators and assembly staff and personal services and sales staff. Broadly, construction companies faced greater recruitment difficulties with occupations where there were underlying qualifications including professionals and technical and scientific staff.

The assessment of these findings needs to be set against the macroeconomic context at the time of the survey. The survey was conducted at a time when the Vietnamese construction industry was still addressing the impact of the global financial crisis (Forrest & Yip 2011; Nistorescu & Ploscaru 2010). This context potentially shapes the current situation of the construction industry and labour market in Vietnam in relation to recruitment, selection and training. In such a situation, although there are several government-initiated programs with the aim of restoring the economy and the construction industry, many construction companies have fallen into bankruptcy or have been required to restructure their organisations (Thuy 2013).

Training may be a response to these recruitment difficulties as companies utilise training to develop their existing workforce and address skill requirements and particular organisational needs. Additionally training may be used as part of a program of workforce development. The extent to which Vietnamese construction companies utilise training and whether particular occupational groups are in disproportionate receipt of this training is evident in the results outlined in Chapter 4. Almost two-thirds (61%) of companies had arranged or funded employee training but this training is unevenly distributed across occupational groups. Additionally there are differences in the provision of off-the-job training and on-the-job training across occupational groups.

In examining training provision across occupational groups, the thesis results show an uneven provision of training by Vietnam's construction companies. There was a clear hierarchy in the provision of training, with that hierarchy revealing an order of technical workers, scientific staff, professionals, senior managers and administrators, clerical and secretarial staff, personal services and sales staff, craft and skilled operators, operators and assembly staff and other manual workers. It shows the descending order of intensive-level training and education of staff such that technical and scientific staff was the occupational group most likely to receive training and manual workers the occupational group the least likely to receive training.

Referring to the types of training favoured by employers for occupational groups, the results show that occupational groups such as professionals, senior managers and

administrators, clerical and secretarial staff, as well as technical and scientific staff mainly received off-the-job training. Occupational groups such as operatives and assembly labour, personal services and sales, craft and operators, as well as other skilled manual workers are mostly likely to receive on-the-job training.

These results indicated that occupational groups conventionally understood to be more highly skilled were disproportionate recipients of training. This pattern did not parallel exactly the recruitment difficulties identified by companies, although the pattern of recruitment difficulty and the pattern of training provision were more highly skewed to highly skilled classifications. Additionally more highly skilled occupations were more likely to receive off-the-job training relative to skilled manual classifications.

### 5.2.2Analysis and discussion of research question two

This section addresses the second research question through examination of the related hypotheses, which were hypotheses H1, H2, H3 and H4. This examination begins with a restatement of the research question:

• Research Question Two: 'What is the relationship between company size and employee training types in construction companies in Vietnam?'

The hypotheses address issues such as the extent to which small and large companies provide training, and two particular predictions in relation to the type of training provided: large companies will be more positively disposed to off-the-job training, while smaller companies will demonstrate a higher utilisation of on-the-job training. As explained below, each of the hypotheses is informed by the relevant literature and a summary table that identifies the linkage and results from Chapter 4 is presented below.

Hypotheses relevant to research question two	Results
H1. Both small and large companies provide employee training.	Accepted
H2. Company size is associated positively with the decision to invest in training.	Rejected
H3. Larger companies provide off-the-job training to their employees more than smaller companies.	Rejected
H4.Smaller companies rely primarily on on-the-job training more than larger companies.	Rejected

Table 5.1: Hypotheses relevant to research question two

Hypothesis H1 predicted that both small and large companies will provide employee training. This hypothesis was framed by the human resource management literature, specifically the premise in literature that organisations will provide training to their workforce in order to develop the skills and of their workforces and the resources available for the organisation to meet their objectives. Within this framework, training offers an opportunity to develop workforce capacity, with the expectation that investment in training will yield tangible results for the organisation, specifically 'the most successful companies and the most successful countries will be those that manage human capital in the most effective and efficient manner' (Stanko, Zeller & Melena 2014, p. 93). In addition, training can be one means by which individual human capital can be enhanced. Such a proposition is affirmed in scholarship that identifies positive benefits for those companies which emphasise the importance of new staff training and updating the skill base of the workforce (Papalexandris & Nikandrou 2000).

The thesis results show that although there are different levels of training provision across companies of different sizes, all construction companies in Vietnam provided at least some training, regardless of company size. In other words, the thesis results provide evidence consistent with the international research and supportive of hypothesis H1.

Hypothesis H2 examined the relationship between company size and corporate decisions to invest in training, predicting that company size is positively associated with the decision to invest in training. The rationale for this hypothesis was shaped by the relevant research scholarship which suggests that company size is a factor that impacts on the likelihood that training will be offered. More specifically larger companies provide more work-related training than smaller companies (Lee 2012). In theory, larger companies have more resources and may be better supported to provide employee training than smaller companies. To the extent that training can be considered a risk, larger companies may be better positioned to take such risks than their smaller counterparts (Zheng, Connie, Hyland & Soosay 2007). Although a significant body of research identified a positive relationship between company size and training provision, the work of Smith (2003) provided a counterpoint, concluding within the confines of

that particular study that there was no positive relationship between company size and training provision.

The results suggest a complex relationship between company size and training provision in the construction industry in Ho Chi Minh City. Specifically, there was not a positive relationship between company size and training provision. Very small companies are less likely to provide training than other companies, but it was small companies that provided the highest level of training. To be precise, small companies recorded the highest proportional level of training provision (33.1%), followed by large companies (24.5%), then medium (23.9%) and finally super small (18.5%) companies. Although hypothesis (H2) is nominally rejected, as presented in the table above, the relationship between company size and training provision is a complex one that will be further discussed below.

Hypothesis H3 assessed the relationship between company size and training type, specifically off-the-job training, as opposed to on-the-job training. This hypothesis was a response to the examination of the relationship between company size and training type which indicates that off-the-job and structured training practices are more likely to be found in larger companies than small and medium-sized companies. Wooden (1996) found that larger companies in Australia are substantially more likely to provide structured in-house training than smaller companies. With regard to training practices that organisations used in Turkey, research suggests that large organisations use more formal training methods compared with small-and medium-sized enterprises (SMEs) (Tanova & Nadiri 2005). In a related study in small company training and competitiveness in the United Kingdom and Europe, Gibb (1997) found that small-sized companies are less likely to fund formal training than larger companies. Finally, Arulampalam and Booth (1997) studied training in Britain and contend that larger companies tend to be less risk averse than smaller companies. The logic of these arguments can also be traced to the linking of company size to the amount of investment capital available to companies (Nguyen, TD 2009). Moreover, according to Black, Noel and Wang (1999) as cited in Lee (2012) 'the fixed costs of training are distributed among more employees in larger firms, thus lowering-per personal costs' (Lee 2012, p. 2598).

The results indicate that two-thirds (59.0%) of companies provide off-the-job training and only about one-third (39.6%) companies use on-the-job training. More than onethird (37.8%) of companies provide both training types (off-the-job training and on-thejob training). In terms of the significance testing, the results indicate that there is some relationship between company size and off-the-job training, but the proposition does not follow that the larger companies are always more likely to provide more off-the-job training than smaller companies. Instead the results again suggest that super small companies are less likely to provide off-the-job training than companies in the larger size categories.

The results indicate that the alignment between the training practices of Vietnamese construction companies and the training practices suggested by international research is a complex one. Once again, this hypothesis (H3) is nominally rejected in the table above. However, the results indicate that the relationship between company size and the type of training provision is potentially nuanced, as foreshadowed in discussion of hypothesis H2. For instance, super-small companies provide off-the-job training at the lowest level (45.5%), while small companies provide at the highest level (66.9%). The other two categories are situated between these parameters at values of 61.5% (large) and 45.5% (medium).

Hypothesis H4 assessed the relationship between company size and training type, specifically on-the-job training as opposed to off-the-job training. This hypothesis was informed by the scholarship assessing the relationship between company size and on-the-job training emphasises the utility of on-the-job training for small businesses(Solomon, Fernald & Tarabishy 2002). According to Johnson (2002), small companies do not use training offered by external providers and government-sponsored initiatives because small companies' owner-managers are simply unaware of the existence of the range of organisations, services and programs that are available to help them to meet their skill needs. In addition, owner-managers in small companies are unwilling to invest money in formal training because they assume that the returns from

formal training could be realised in the long term rather than the short term (Johnson 2002).

Similarly Hill and Stewart (2000) assert that small companies mainly focus on informal training to provide solutions for work-related problems, and studies have found that many small companies have not provided any formal training for employees (Hill & Stewart 2000). Once more, Smith et al.'s (2003) study provides contrary findings to these trends, indicating that there is an unclear relationship between company size and training provision and type (Smith, A et al. 2003). The thesis results indicate that there was no significant relationship between company size and on-the-job training, and therefore hypothesis H4 cannot be supported by this thesis. In fact, the sample shows that on-the-job training is provided at a lower rate than off-the-job training.

The thesis results discussed thus far indicate some complexity in the relationship between company size and training provision. This was evident in the nominal rejection of a number of hypotheses and the disjuncture between elements of these results and those reported elsewhere in the literature. This section advances some informed arguments as to why the thesis sample returned results that contrast with those reported in the review of the literature. A key factor may be differences in the definition of small business across research studies. The definitions adopted in this thesis were consistent with Vietnamese practice as established Decree 56/2009/ND-CP, dated 30/6/2009, for construction companies in Vietnam. Yet the category of small business is differentially defined across different contexts. For example, the Vietnamese tradition of defining small businesses as between 10 and 200 employees stands in some contrast to the definition applied in Australian research, which is defined as a business employing less than 20 people. Indeed, the definition of small business employed in Vietnam approximates the definition of medium business as applied in Australia (Nguyen, TD 2009; Zhang, Cheng & Harvie 2013). A further contributing factor may be the nature of the construction industry and the particular circumstances faced by small construction companies. These circumstances include weaknesses in the areas of finance, technology and human resources. However, the competitive pressures of the marketplace might result in some businesses adapting to new challenges through increased provision of employee training (Vinh 2015).

Super small companies in Vietnam are defined as companies with an average number of less than 10 employees (Nguyen, TD 2009). Those companies are characterised by low technology and difficulties in raising finance and establishing market share. They face difficulties in gaining support through government policy-related initiatives to support their own development (Phuong, T 2014). Therefore, there may be financial and resource impediments to super small companies that limit their training provision relative to that provided by larger-sized companies. Medium and large companies often have advantages in obtaining key human resources and maintaining a highly trained staff. Furthermore, they may have the ability to recruit employees with desired qualifications and skills profiles to meet their needs from the early stage of recruitment. State-owned companies are gradually being equitised into joint-stock companies with the intention of seeing improved outcomes (Vu, M 2014). Such companies are fully supported by the Vietnamese government and this may have contributed to the very similar training practices that such companies pursue, as observed in the results in this thesis. These findings stand in some contrast to that evident in the wider research scholarship. As an example, Tanova & Nadir (2005) suggest that large companies are more likely to apply formal methods in human resource development because they respond to coercive, mimetic and normative pressures (Tanova & Nadiri 2005).

These differences in findings suggest that there may be key contextual factors that shape the relationship between company size and training provision. These include the nature of the construction industry in Vietnam. According to Tabassi, Ramli and Bakar (2011), the construction industry is a project-based industry. The dynamic environment and changing demands of construction activities require the formation of project teams each time a new project is committed. Construction companies are focused on managing phases in construction projects with a few directly employed managers and professional staff in order to lead outsourced project teams. Sourcing an external workforce to meet project demands is very common in the construction industry (Tabassi, Ramli & Bakar 2011).

The completion of project work in the Vietnamese construction industry most frequently requires a network of primary contractors and sub-contractors. In these cases, the main or primary contractor is the company that is awarded the project tender. These main contractors can carry out the construction work through their own resources. However, in practice, most of the companies who are main contractors often utilise smaller companies as sub-contractors. These smaller operatives implement assigned categories of work in construction projects with the allocation of work often the culmination of a period of negotiation. The provisions of Vietnam's Construction Law (Law No. 50/2014/QH13) apply to construction contracts. At the time of signing construction contracts, contractors must have the ability to meet professional operational capabilities. For a joint operation, the quantity of work required by the contract must be specified. The division of work between the contractor and subcontractors must reflect negotiation and agreement between the parties. Each party to the contract is required to assure their capability to undertake the assigned work. If the main contractor is a FDI company, there is a requirement for a commitment to provide work to local sub-contractors who are qualified for carrying out parts of the construction project (Bach 2015; Nguyen, SH 2014). In such circumstances, larger companies contract out specific aspects of the construction project to smaller companies. The training of employees for these construction tasks falls more to smaller companies. It is the responsibility of small companies to ensure that their workforce is sufficiently qualified to address the provisions of their contract with larger companies.

It is these features of the construction industry in Vietnam, in addition to the distinctiveness of the classification of company size, which may account for distinctiveness of the results relative to that evident in the international research (Lee 2012; Tanova & Nadiri 2005). This distinctiveness and complexity of the relationship between company size and training practices is addressed in further detail in section 5.2.4.

#### 5.2.3 Analysis and discussion of research question three

This section of the chapter focuses on the relationship between ownership and training types. The following discussion will address the third research question through examination of the related hypotheses, which were hypotheses H5, H6 and H7. This examination begins with a restatement of the research question:

• Research question three: 'What is the relationship between company ownership and employee training types in construction companies in Vietnam?'

The hypotheses address issues such as the extent to which companies with different ownership structures provide training and three particular predictions in relation to training provision, these being that FDI companies provide employee training more than local private companies, while joint-stock companies provide employee training more than local private companies, and that local private companies provide training less than state-owned companies. As explained below, each of the hypotheses is drawn from the relevant literature and a summary table that identifies the results from Chapter 4 is presented below.

Hypotheses relevant to research question three					
H5. FDI companies provide employee training more than local private	Accepted				
companies.					
H6. Joint-stock companies provide training more than local private companies.					
H7. Local private companies provide training less than state-owned companies.	Accepted				

 Table 5.2: Hypotheses relevant to research question three

Before discussing research question three and the related hypotheses, the results about company ownership and employee training provision should be reviewed to define the relationship between company ownership and employee training provision. In terms of the relationship between company ownership type and employee training provision, the results show that almost two-thirds (61%) of companies provided employee training in the previous 12 months. Specifically, FDI companies provided employee training at the highest rate, at 86.6%. FDI companies were followed by state-owned companies (68%)

and joint-stock companies (56%), while the lowest rate of provision was recorded by local private companies (35.7%). In terms of off-the-job training, nearly two-thirds (59%) of companies provided it. More than one-third (39.6%) of companies provide on-the-job training. More than one-third (37.8%) of companies provided both training types (off-the-job training and on-the-job training).

The findings of this thesis are generally consistent with those established by previous research, particularly that concerning FDI companies. Truong & Le (2007) observed that FDI companies considered employee training as an investment, such that they are willing to provide employee training and often have advantages in financing and technology transfer thanks to support from a parent company abroad. For state-owned companies, previous research in Vietnam provided some evidence that managers in state-owned enterprises considered training as an expenditure that needed to be minimised (Truong & Le 2007). Yet state-owned companies can be also potentially drawn upon investment capital which is fully subsidised. However, the thesis results show that state-owned companies. Therefore, the results of this investigation deviate from the previous research in this regard.

Contributing factors to these distinctive findings may lie in the scope of different research studies. As an example, the study by Truong & Le (2007) was not specifically focused on the construction sector, with respondents drawn from a range of industries. Another factor contributing to the difference in findings may lie in the strong contemporary consideration provided to the construction industry by the Vietnamese government. The Vietnamese government considers the construction industry to be a key industry for the progress of industrialisation and modernisation of Vietnam. The role of the construction industry is important in building infrastructure, such as the construction of bridges, expressways, roads, airports, seaports and power plants, with the aim of supporting businesses in Vietnam and contributing to social and economic growth. For instance, besides completed construction projects, there are significant upcoming projects such as constructing an expressway system from the north to the south of Vietnam, deep-water seaports in Hai Phong, Khanh Hoa and Ba Ria-Vung Tau

and an international airport in Long Thanh, Dong Nai province. In addition, the construction of many hydropower projects will continue until 2020 to meet increasing power demand. Moreover, more luxury hotels will be developed to accommodate international visitors. Furthermore, the government has approved an urban upgrading program to 2020, with total investment amounting to VND175 trillion. This program aims to upgrade housing in areas for low-income people and urban centers with poor technical infrastructure (The-Saigon-Times 2009).

Therefore, it could be argued that the construction industry is a key industry required for supporting and strengthening the development of the Vietnamese business sector and cities, as well as attracting international business cooperation and trade. This could be particularly valuable for Vietnam in developing relationships with the many countries associated with trade institutions such as ASEAN (Association of Southeast Asian Nations), WTO (World Trade Organisation), TPP (Trans-Pacific Strategic Economic Partnership Agreement) (The-Saigon-Times 2009; Tran & Nguyen 2014). Although the construction industry has encouraged a multitude of ownership types, state-owned companies still occupy a leading role in the construction industry. Consequently, state-owned companies are supported and sponsored for employee training by the Vietnamese government (Tran & Nguyen 2014; Vu, TTA 2012).

Joint-stock companies provide employee training less than both FDI and state-owned companies, but the provision of training still exceeds 50%. Local private companies provide a smaller amount of training (35.7%), although as previously discussed these companies may also fulfill the role of sub-contractors on construction projects and be required to utilise training to demonstrate that they are able to meet their requirements for the construction project. The results provide some evidence to support the theory, posited by Truong & Lee (2007), that local private companies do not really focus on employee training provision. Instead, local private companies were more likely to consider training as the central responsibility of the government (Truong & Le 2007).

Hypothesis H5 is the first hypothesis addressing research question three predicting that FDI companies provide employee training more than local private companies. This hypothesis draws its inspiration from the literature on human resource management

practices in a transitional economy. Specifically, it focused on employee training provided by domestic or local private companies and companies with FDI capital. Within this framework, there are few studies in Vietnam to compare the training provided by FDI companies relative to that provided by local private companies. However, there is a variety of research in Asia to affirm that multinational companies investing in host countries do provide training to improve their workforce and as an investment in human capital (Lynch & Black 1995; Shen & Darby 2006; Tan & Batra 1996; Zheng, C, Morrison & O'Neill 2006).

The results show significant differences between training levels provided by FDI companies and local private companies, with FDI companies providing both types of training at a higher rate than local private companies. For off-the-job training, 85% of FDI companies provided training, while only 30.2% of local private companies provided training of this type. For on-the-job training, 70.9% of FDI companies provided this training type, while only 15.1% of local private companies provided such training. Therefore, the results of the current thesis are consistent with the literature and confirm hypothesis H5: FDI companies provide more employee training, both off-the-job training and on-the-job training in comparison with local private companies.

The second hypothesis that addresses research question three was hypothesis H6 which predicted that joint-stock companies provide training more than local private companies. This hypothesis was informed by the international research on training provision and research on human resource management practices in a Vietnamese economy in transition. Particularly, it aimed to explore employee training provided by joint-stock companies and local private companies. The preceding scholarship suggests that the changing nature of the Vietnamese economy is generating more diversity in company ownership types. Particularly, there is an increase in joint-stock companies, either through newly established joint-stock companies or through the gradual equitisation of former state-owned companies as they develop into joint-stock companies in an effort to increase operational effectiveness (Mayer Brown 2014). Accordingly, managers in joint-stock companies are under pressure to allocate company resources more effectively and to apply efficacious managerial practices for performance improvement. Furthermore,

employee participation, in the form of shared ownership in newly privatised companies, serves as an incentive for employees to work harder for mutual benefit (Le, CT & Truong 2005).

Consistent with hypothesis H6, local private companies do appear to provide less training than joint-stock companies. Truong & Le (2007) offer the following argument in relation to the restricted use of training observed in these local private companies:

While local private companies find themselves in a different situation. Their owners are dynamic, receptive, eager to learn, and as young entrepreneurs they are more willing to take risks. However, since their managerial expertise is mainly based on a 'learning by doing' basis, they often lack critical management skills and knowledge, especially in HRM to conduct their business properly. Moreover, many local private companies are trapped in the syndrome of cost-cutting myopia, and hence, are inclined to narrow the scope of activities of the HRM department (Truong & Le 2007, p. 28).

The results show significant differences in the provision of training between joint-stock companies and local private companies. Joint-stock companies provided more employee training than local private companies across both types of training. For off-the-job training, 53% of joint-stock companies provided off-the-job training, while only 30.2% of local private companies did. In addition, for on-the-job training, 33.3% of joint-stock companies provided on-the-job training, while only 15.1% of local private companies provided this form of training. This suggests support for previous research findings and a confirmation of hypothesis H6. In other words, it could be stated that joint-stock companies provided more employee training, comprising both off-the-job training and (on-the-job training, in comparison with local private companies.

The third hypothesis that addresses research question three was hypothesis H7 focused on employee training provided by local private companies and state-owned companies. Hypothesis H7 predicted that local private companies provided training at a lower rate than state-owned companies. This hypothesis drew its reference point from that research in Vietnam that suggests that compared with state-owned companies, local private companies are less involved in both on-site and off-site training activities, indicating their lack of formalisation in the development of human capital. In addition, state-owned companies, as state representatives, are under more pressure to conform to legal regulations concerning labour relations than are local private companies, given the weak enforcement of laws in Vietnam (Truong & Le 2007).

The results show significant differences between local private companies and stateowned companies, in which local private companies provided employee training at a lower rate than state-owned companies across both training types. Only 30.2% of local private companies provided off-the job training; the commensurate rate is 68% for stateowned companies. Turning to on-the-job training, 15.1% of local private companies provided this type of training while the rate was 39.2% for state-owned companies. Therefore, hypothesis H7 was accepted. In other words, it can be stated that local private companies provided less employee training, both off-the-job training and on-the-job training, than state-owned companies.

In summary, the results provide evidence to confirm that there is a significant relationship in the Vietnamese construction industry between company ownership type and employee training provision. This relationship is evident across off-the-job training on-the-job training. The results also confirm that FDI companies provide employee training more than local private companies, that joint-stock companies provide training more than local private companies and that local private companies appear to provide training less than state-owned companies.

#### 5.2.4 Analysis and discussion of research question four

This section addresses the fourth research question through examination of the related hypotheses, which were hypotheses H8, H9, and H10. This examination begins with a restatement of the research question:

• What is the relationship between company size and the attitudes of managers towards employee training in construction companies in Vietnam?

The hypotheses address the attitudes of managers in different sized companies towards employee training provision and training types. It was predicted that the managers in larger companies would exhibit more positive attitudes towards employee training provision than the managers in smaller companies. It was predicted also that the managers in larger companies would exhibit more positive attitudes towards off-the-job training relative to small companies and that the managers in smaller companies would exhibit more positive attitudes towards off-the-job training relative to small companies and that the managers in smaller companies. As explained below, each of the hypotheses is informed by the relevant literature and a summary table that identifies the linkage and results from Chapter 4 is presented below.

Hypotheses relevant to research question four		
H8. Managers in larger companies will have more positive attitudes towards employee R		
training investment compared to managers in smaller companies.		
H9. Managers in larger companies will have positive attitudes towards off-the-job training.		
H10. Managers in smaller companies will have positive attitudes towards on-the-job training.	Rejected	

Hypothesis H8 examined the relationship between the attitudes of managers in larger companies and smaller companies towards employee training provision, predicting that the managers in larger companies would have more positive attitudes about employee training provision compared to the managers in smaller companies. The hypothesis was shaped by the relevant scholarship which suggests that company size is a factor that impacts on the attitudes of managers towards employee training. More specifically, the available research suggests that larger companies tend to provide employee training more than small companies (Lee 2012).

The results indicate that the attitudes of managers in different sized companies towards employee training provision are complex. Specifically the findings indicate that the relationship between company size and positive attitudes is not a positive one; attitudes towards training do not become more positive as company size increases. In the area of on-the-job training, the mean of the statements about the effectiveness of employee training provision indicated that the highest mean was recorded for medium companies (4.27), followed by large companies (4.23), then super small companies (4.19) and finally small companies (4.16). For off-the-job training, the mean of the statements about the effectiveness of employee training provision indicated that the highest mean was recorded by large companies (3.58), followed by medium (3.55) companies, then super small (3.51) and finally small (3.47) companies. This absence of a clear positive relationship between company size and attitudes to training meant that hypothesis H8 was rejected, although it can be noted that the findings are more congruent with the hypotheses in regards to off-the-job training than on-the-job training.

Hypothesis H9 assessed the relationship between the attitudes of managers in different sized companies towards the effectiveness of off-the-job training provision. These hypotheses were framed by the relevant research, particularly that which assessed that larger companies were more likely to support formal training than smaller companies. For instance, Bhattacharya, Doty and Garavan (2014) affirm that larger companies prefer off-the-job training, using outsourced training, to on-the-job training (Bhattacharya, Harold Doty & Garavan 2014). Moreover, owner-managers of small companies are unwilling to invest money in formal training because they assume that the returns from formal training could be realised in the longer rather than shorter term (Johnson 2002).

The results indicate that there are positive attitudes towards off-the-job employee training. However, the relationship between positive attitudes towards formal training and company size is complex. With regard to off-the-job training, the results identified the mean of the statements about the effectiveness of employee training provision, the highest mean that was recorded was for large companies (3.58), followed by medium (3.55), then super small (3.51) and finally small (3.47) companies. It was the results for small and super small companies that most obviously demonstrated the absence of the predicted relationship across the company sizes, and it was on this basis that hypothesis H9 was rejected.

Hypothesis (H10) assessed the relationship between the attitudes of managers in different sized companies towards the effectiveness of on-the-job training provision.

The results indicate that there are positive attitudes towards on-the-job training. However, the results also indicated a lack of a clear correlation between positive attitudes towards informal training and company size. For on-the-job training, the results identified the highest mean in response to the statements about the effectiveness of employee training provision, which was recorded by medium companies (4.27), followed by large companies (4.23), then super small companies (4.19) and finally small companies (4.16). As these results do not support the predicted relationship between company size and manager attitudes toward training, hypothesis H10 was rejected.

In considering this absence of a positive correlation between company size and the attitudes of managers toward training, it is appropriate to consider those factors that may distinguish the experience of Vietnamese construction companies from that evident in research reviewed elsewhere in this thesis. This consideration occurs below through a more finely grained analysis of the results for each statement. This will allow further discussion of a particular dynamic evident in the results, namely the positive attitudes towards training. These positive attitudes are evident despite the absence of training infrastructure in companies, such as a training department. Although some positive attitudes are evident, the expected relationship between positive attitudes and company size was less prominent than that evident in the international research.

Similar complexities in the relationship between company size and training provision were discussed earlier in this chapter. Thus small companies were more evident providers of training than that suggested by the research, a result that may be attributable to the classification of business size in Vietnam but also the contracting role played by small companies on large construction projects initiated by foreign investment and requiring particular evidence of skills and capability in order for the contract to be secured. While this suggests training as a priority for some locally owned companies as a priority in order to secure project contracts, the provision of training was more evident in FDI companies, joint-stock companies and state-owned companies in comparison to local private companies. This complexity may be traced in the uneven impact of marketisation across the Vietnamese construction sector, with companies responding to the requirements of marketisation in different ways. It may also reflect the uneven implementation of formalised management structures and human resource management practices as organisations adapted to the shift from a command to a market economy.

For a deeper understanding of the attitudes of managers in different sized companies towards employee training types, the rating results of each statement referring to effectiveness of employee training for each training type will be discussed.

Within the statements there were a number that drew responses regarding the broad purpose of training. These included the contribution of training to improving productivity (1), improving employee performance (2), facilitating strategic aims (3), increasing competitive advantage (4), increasing employee skills (5), building the company's specific human resources (8), improving the positive attitudes of employees (9), addressing the needs for innovation (12) and meeting business changes (13). The statements were informed by the research which has assessed the relationship between training and company performance and outcomes. The results permit analysis of differences in the responses between on-the-job and off-the-job training and by company size. With a few exceptions, the responses to each of these particular statements were not distinct from that already discussed for research question four and its associated hypotheses.

In contrast to the results for the statements taken as a whole, managers' response to the statements concerning the utility of off-the-job training for improving employee performance showed some distinction in responses from managers of different sized companies. The attitudes of managers in large companies were more supportive of off-the-job training relative to the attitudes demonstrated by managers in companies, other than large companies.

This same distinctiveness was evident also in the managers' responses to the utility of off-the-job training to assist companies achieve their strategic aims. Managers in larger companies demonstrated more positive attitudes towards the use of training to assist organisations achieve strategic aims, relative to small and super small companies. This result shows some alignment with the literature, with training being viewed as consistent with the strategic vision of companies (Aguinis & Kraiger 2009; Mamaqi 2015). Managers of construction companies in Vietnam support employee training provision to assist companies achieve their strategic aims. On this indicator company size was a

factor, with managers of large companies demonstrating more positive attitudes towards employee training for this purpose relative to managers of other-sized companies. Company size was also an issue in differentiating the attitudes towards the utility of offthe-job training to increase employee skills. There were significant differences in the attitudes of managers in medium companies relative to the managers in small companies. The managers in medium companies had more positive attitudes than the managers in small companies.

A further set of statements examined the responses to identifying the most appropriate training approach (6) and identifying which training provided the greater return on training investment (7). Interest in the attitudes of managers in these two areas was informed by research which demonstrates smaller companies prefer to provide informal or on-the-job training rather than formal or off-the-job training. Otherwise, larger companies prefer formal or off-the-job training (Bhattacharya, Harold Doty & Garavan 2014) and small and medium enterprises tend to provide informal, on-the-job training (Almeida & Aterido 2015). For the most appropriate training approach, the results indicate that managers indifferent sized companies had positive attitudes towards employee training but with no significant difference between on-the-job and off-the-job training in terms of identifying a particular form of training as being the most appropriate type of training. In terms of training for achieving greater return on training investment, the results indicate that managers in different sized companies had positive attitudes towards employee training provision for achieving greater return on training investment of company regardless of whether the training was on-the-job or off-the-job training.

Two statements were implicitly critical of training, namely that training was a waste of finances (10) (Klaasen 2013) and a means of encouraging staff turnover (11) (Alexander Newman, Rani Thanacoody & Hui 2011). These statements were designed to assess whether employee training may be assessed by managers as a waste of money due to the risk of the trained employees moving to other companies (Gospel & Lewis 2011) or simply as a waste of company time and resources (Klaasen 2013). Referring to the statement that training provision is a waste of money, the results indicate that the

managers in different sized companies indicated negative attitudes towards the statement that employee training provision is a waste of money regardless of whether the training was on-the-job or off-the-job training. For on-the-job training, there are no significant differences between the attitudes of managers from different sized companies. For offthe-job training, there are significant differences in the attitudes of managers from different sized companies. Managers from medium-sized companies recorded the highest level of disagreement with the statement that training is a waste of money relative to managers from other companies and the differences in the level of disagreement was significant. Referring to the statement that training is encouraging staff turnover, the results indicate that the managers in different sized companies indicated negative attitudes towards the statement that employee training provision is encouraging staff turnover regardless of whether the training is on-the-job or off-the-job training. In addition, the results also indicate no significant differences in the attitudes of managers from different sized companies in terms of either on-the-job training or offthe-job training.

The analysis of manager responses to the statements highlights trends evident elsewhere in these findings. In spite of the absence of elaborate training infrastructure, managers expressed positive attitudes towards training and more specifically responded positively towards the capacity for training to assist companies achieve strategic objectives. Yet while the pattern of positive attitudes towards training showed some alignment with the pattern of training provision, there were also complexities evident in the findings. While small companies provided the highest level of training it did not necessarily follow that the managers in small companies had the most positive attitudes towards training. There was not a consistently significant relationship between company size and positive attitudes towards training, and there was only a limited consistency in findings across each statement on the indicator of company size. The findings also did not support the proposition evident in the international literature that managers in large companies would have more positive attitudes towards off-the-job training relative to managers in smaller companies, although this was evident for particular statements. Yet based on the mean scores, managers from different sized companies demonstrated positive attitudes towards employee training regardless of training type.

# 5.2.5 Analysis and discussion of research question five

This section addresses the fifth research question through examination of the related hypotheses, which were hypotheses 11, 12 and 13. This examination begins with a restatement of the research question:

• What is the relationship between company ownership and the attitudes of managers towards employee training in construction companies in Vietnam?

The hypotheses address the attitudes of managers in companies with different ownership structures towards employee training provision and training types. There were three particular predictions in relation to the attitudes of managers and employee training provided. Hypothesis H11 predicted that managers in FDI companies would have more positive attitudes towards employee training than locally owned companies. Hypothesis H12 predicted that managers in joint-stock companies would have more positive attitudes towards employee training than managers in local private companies. Finally, hypothesis H13 predicted that managers in state-owned companies would have more positive attitudes towards employee training than managers in local private companies. A summary table that identifies the linkage and results from Chapter 4 is presented below.

Hypotheses relevant to research question five	
H11. Managers in FDI companies will have more positive attitudes towards training	
investment compared to mangers in local private companies.	
H12. Managers in joint-stock companies will have more positive attitudes towards training	Accepted
investment compared to managers in local private companies.	
H13. Managers in state-owned companies will have more positive attitudes towards	Accepted
training investment compared to managers in local private companies.	_

Table 5.4: Hypotheses	relevant to	o research	question five
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Hypotheses H11, H12 and H13 were framed by the relevant literature. According to the research in Asia, there were positive relationships between foreign ownership and training provision. Foreign-invested companies are more positively disposed towards providing employee training (Zheng, Connie, Hyland & Soosay 2007). More broadly, research in Vietnam showed that managerial perspectives towards training was differentiated by ownership type (Truong & Le 2007).

In this section, the first hypothesis that addressed research question five was hypothesis H11 which predicted that managers in FDI companies would have more positive attitudes towards employee training provision than managers in local private companies. This hypothesis was framed by the emerging literature on human resource management practice in a transitional economy, Vietnam. Specially, it focused on the attitudes of managers in FDI companies and local private companies towards employee training provision. The rationale for this hypothesis was that FDI companies seemed to be committed to the strategy of finding and employing qualified employees and rewarding them with commensurate wages and conditions (Truong & Le 2007). The results outlined in Chapter 4 indicated that managers in FDI companies had more positive attitudes towards employee training compared to the managers in local private companies. Therefore, hypothesis H11was accepted.

Hypothesis H12 examined differences in the attitudes of managers in joint-stock companies and managers in local private companies towards employee training provision. It was predicted that managers in joint-stock companies would have more positive attitudes towards employee training provision compared to managers in local private companies. The rationale for this hypothesis was shaped by the relevant research scholarship which suggests that company ownership is a factor that impacts on the attitudes of managers towards employee training (Truong & Le 2007). The results, outlined in Chapter 4, indicated that the managers in joint-stock companies have more positive attitudes towards employee training compared to the managers in local private companies. Therefore, hypothesis H12 was accepted.

The final hypothesis linked to research question five, hypothesis 13 (H13) examined differences in the attitudes of managers in state-owned companies and managers in local private companies towards employee training provision. With the key roles of state-owned companies in the construction industry in Vietnam (Hop 2014; TM 2014), it was predicted that managers in state-owned companies would have more positive attitudes towards employee training provision compared to managers in local private companies. The results indicated that managers in state-owned companies had more positive

attitudes towards employee training provision compared to managers in local private companies. Therefore hypothesis H13 was accepted.

In summary, the results indicated that there are differences in the attitudes of managers in companies of different ownership types towards employee training. For on-the-job training, the highest mean in response to the statement about the effectiveness of employee training provision was recorded for the managers in FDI companies (3.65), followed by state-owned companies (3.62), joint-stock companies (3.50) and finally local private companies (3.49). Similarly, for off-the-job training, the highest mean in response to the statement about the effectiveness of employee training provision was recorded for the managers in FDI companies (3.57), joint-stock companies (3.47) and finally local private companies (3.46).

The attitudes of managers in state-owned companies towards training show some contrast to that evident in other training research in Vietnam. Truong and Le (2007) assessed the managers in state-owned enterprises considered training as an expenditure that needed to be minimised (Truong & Le 2007). Similarly, Vo (2009, p. 114) noted that that 'SOE employees were not motivated to learn and develop new skills and knowledge'. A number of factors may potentially contribute to the differences in these results. Firstly, the Truong and Le (2007) and Vo (2009) studies are based on the general population of companies from a variety of industries; they did not focus specifically on the construction industry. This was also a limitation recognised in the authors' discussion of their results, with the authors recommending further study in a particular industry such as the construction industry. Secondly, the previous studies were either undertaken nearly a decade ago (Truong & Le 2007) or relied on data from a similar period (Vo 2009). Thus the insights about approaches to training and training provision may be poorly aligned with the current practices of the Vietnamese government and a rapidly expanding construction industry, specifically the way in which construction companies mobilise and utilise resources for training.

For a deeper understanding of the attitudes of managers in companies of different ownership types towards employee training and types of employee training, the responses of managers to each statement referring to the effectiveness of employee training for each training type will be considered.

As with the consideration of statements in the analysis of research question four, there were a number of statements that drew responses regarding the broad purpose of training. These included the contribution of training to improving productivity (1), to improve employee performance (2), facilitating strategic aims (3), to increase competitive advantage (4), to increase employee skills (5), build the company's specific human resources (8), to improve the positive attitudes of employees (9), to address the needs for innovation (12) and meet business changes (13). The statements were informed by research which has assessed the perceived and measured relationship between training and company performance and outcomes. The results permit analysis of differences in the responses between on-the-job and off-the-job training and by company ownership and often enable a hierarchical ordering of responses by company type. As the results presented in Chapter 4 suggest, the anticipated impact of company ownership type on positive attitudes towards training was evident and for both forms, off-the-training and on-the-job training, with the managers in FDI companies indicating more positive attitudes than managers in other company types. This was evident for the majority of, though not all, statements, remembering also those positive attitudes towards training were also demonstrated by managers in joint-stock companies, stateowned companies and local private companies.

The impact of ownership type was at times more distinct with regard to off-the-job training than it was for on-the-job training. For example in response to the statement that training is for improving productivity there were significant differences in the attitudes of managers in companies of different ownership types towards off-the-job employee training. Managers from FDI and state-owned companies had more positive attitudes towards off-the-job employee training than local private companies. A different form of ranking was evident in managers' response to the statement concerning the utility of off-the-job training for improving employee performance.

Turning to the statement assessing the utility of employee training provision for building the company specific human resources, at times company ownership type exercised an impact that was not evident through assessment of the mean scores. In response to the statement assessing the utility of employee training provision for building human resources the results indicate that managers of companies of different ownership types demonstrated positive attitudes towards employee training provision. These attitudes were evident irrespective of whether the training was on-the-job or off-the-job training. This result shows some alignment with the literature, with training being viewed as having an essential role in improving skills and enriching knowledge of employees in a range of technical, management and specific job skills (Shammot 2014). It was with regards to off-the-job training that the distinctive results were evident. Managers in private companies demonstrated more positive attitudes relative to state-owned companies, as well as FDI companies. Managers in joint-stock companies demonstrated more positive attitudes relative to state-owned companies and FDI companies.

As with the discussion of the statements aligned to research question four, a further two statements examined the response to identifying the most appropriate training approach (6) and identifying which training provided the greater return on training investment (7). Managers in companies of different ownership types demonstrated positive attitudes towards training irrespective of whether it was on-the-job or off-the-job training. There were no significant differences evident in the attitudes of managers in companies of different ownership types training. However, for on-the-job training, there were significant differences evident in the attitudes of managers in companies of different ownership types. Managers in FDI and state-owned companies were more supportive of on-the-job training relative to the attitudes demonstrated by managers in local private companies and joint-stock companies.

The next consideration is managers' response to the statement concerning the utility of training for achieving greater return on training investment. Managers in companies of different ownership types demonstrated positive attitudes towards the utility of employee training provision for achieving a greater return on training investment. These attitudes were evident irrespective of whether it was on-the-job or off-the-job training.

With regard to both on-the-job training and off-the-job training company ownership was a differentiating factor with managers in FDI companies more supportive of each training type relative to the attitudes demonstrated by managers in other company types.

Within the statements considered by managers, two statements were directly critical of training. Turning to the statement that employee training provision is a waste of money (10), the results indicate that managers in companies of different ownership types have negative attitudes towards this statement. This finding was inconsistent with research which suggests that training provision for employees may be viewed negatively because of perceptions that it involved a waste of company time and resources (Almeida & Aterido 2015; Johnson 2002; Klaasen 2013; McMaster 2001; Smith, SA & Mazin 2011). The effective rejection of the proposition was evident regardless of whether the training was on-the-job or off-the-job training. The impact of company ownership type was consistent with that results presented for the hypotheses linked to research question five. Managers in FDI companies indicated more negative attitudes towards the statement that employee training provision is a waste of money relative to the attitudes demonstrated by managers in companies with other ownership types.

Turning to the statement assessing the utility of employee training provision for encouraging staff turnover, the results indicate that managers in companies of different ownership types demonstrated negative attitudes towards this statement. It means that this result shows some alignment with research that suggests that training, rather than contributing to increased turnover, contributes to decreased turnover of employees (Kennett 2013). These attitudes were evident irrespective of whether it was on-the-job or off-the-job training. As with the previous statement, the impact of company ownership type was consistent with that reported elsewhere for this research question with the managers in FDI companies indicating more negative attitudes towards the statement that employee training provision is encouraging staff turnover relative to the attitudes demonstrated by managers in state-owned companies, private companies and joint-stock companies. The managers in state-owned companies and joint-stock companies indicated more negative attitudes relative to the attitudes demonstrated by managers in private companies. As evident elsewhere in these findings, managers demonstrated positive attitudes towards training. These attitudes were evident despite the absence of sophisticated training infrastructure. Positive attitudes were evident from managers irrespective of company ownership type, yet the degree of support evident for the statement was frequently, although not uniformly, differentiated by company ownership type. Managers in FDI companies had more positive attitudes than managers in other company types. In framing the hypotheses linked to research questions, it was anticipated that the managers in FDI companies would have more positive attitudes than those of joint-stock companies, state-owned companies and local private companies. These hypotheses were framed by an as yet emerging literature on the application of human resource management practices in Vietnam, research that was still coming to terms with the dimensions and features of a transitioning Vietnamese economy.

# **5.3 Conclusion**

In practice, more than 90% of the surveyed companies do not have a specific department or unit responsible for training, yet nearly two-third (61%) of companies had arranged or funded training over the preceding year.

The anticipated relationship between training provision and company size was not evident in this research, with training provision not positively linked to company size. Some 33% of small companies provided training, followed by 24.5% of large companies, 23.9% of medium companies and 18.5% of super small companies.

In assessing the relationship between training provision and company ownership types, there was a greater alignment between the findings and that suggested by the research. The highest rate of training provision was recorded by FDI companies (86.6%), followed by state-owned companies (68%), joint-stock companies (56.1%) and local private companies (35.7%).

Managers from different sized companies demonstrated positive attitudes towards training and the anticipated relationship between positive attitudes towards training and

company size was not evident across all statements concerning training. There were also complexities in the pattern of attitudes towards training and the pattern of training provision by company size. The relationship between company ownership type and positive attitudes towards training was more closely aligned to that predicted by the hypotheses, with managers in FDI companies having more positive attitudes than managers in other company types. Yet this relation was not evident across all the attitudes of managers, and managers in companies other than FDI companies also demonstrated positive attitudes towards training.

The findings about training provision in the construction industry and the attitudes of managers towards training indicate some departure from the pattern of training suggested by the research reviewed in Chapter 2. Contributing factors to this dissonance may lie in the transitioning Vietnamese economy. A significant proportion of the research reviewed in Chapter 2 was drawn from the experience of Western industrialised nations, whereas the Vietnamese economy is in the process of transitioning to a marketised economy. This process includes the increased accommodation of foreign investment and the evolution of state-owned companies. The inconsistent pattern of training provision, particularly by company size may reflect an uneven rate of transition and may also impact the particular requirements of project work in the construction industry and the requirement to demonstrate project readiness. The pattern of training provision by ownership type may reflect the impact of HRM and training practices and attitudes to training influenced by internationally based parent companies. Yet positive attitudes towards training and evidence of off-the-job and on-the-job training provision were not confined to FDI companies, suggesting that Vietnamese companies are adopting practices aligned to HRM and HRD functions, even though companies may lack highly formalised HRM and HRD structures and processes.

# **CHAPTER 6: CONCLUSION AND RECOMMENDATIONS**

# **6.1 Introduction**

This chapter concludes the thesis and provides recommendations for training practice as well as for future research. The conclusions relate to the key findings and themes that the thesis has identified, and consider the ongoing issues that the thesis has highlighted. Recommendations extend upon these conclusions to identify some alternative policy responses to these issues. The chapter is organised into four specific sub-sections, commencing with this introduction in Section 6.1. General conclusions are presented in Section 6.2, while Section 6.3 provides the recommendations for training policy and practice. Finally, Section 6.4 identifies the limitations of the thesis and offers some further recommendations for future research in the area.

## **6.2** Conclusions

The motivation of the thesis emerged from the central findings of the international literature on training practices. This scholarship has identified company size and ownership type as factors that can have an impact on levels of training provision. Whether these findings would be replicated in the case of the Vietnamese construction industry has led to the formulation of relevant hypotheses, the creation of an extensive data set, and the analysis and interpretation that has been presented in previous chapters. As with any research, the findings and their explanation raise as many questions as they answer. While some there is some congruence with previous studies, there is also some disparity, and a number of issues and challenges remain for the industry.

The findings suggest that the ownership type of company plays a greater role in shaping training practices than company size, and as such the findings offer mixed support to the extant literature and the hypotheses. Attitudes toward training are generally positive across company form, hinting that managers in the industry are likely to support further training provision. Yet, skills shortages remain, and it is questionable whether the resources and infrastructure is being made available to deal with this shortfall. In this

sense, the findings of this thesis suggest that the Vietnamese construction industry faces a series of ongoing challenges concerning the provision of training. These challenges lie primarily in the discord between the levels of training provision, the positive attitudes towards training, and the evidence of ongoing skill shortages in the industry. As now discussed, the construction industry appears to demonstrate an incomplete approach to training, and this is apparent in the pattern of training and the resources utilised to support it.

One remarkable finding of the thesis is that very few companies reported training infrastructure in the form of a specified training department or access to external training sponsorship and subsidies. Yet companies of all sizes and ownership types provide training to some extent, primarily relying upon internal resources to provide it. Therefore, the effect of the factors that the international scholarship has hitherto nominated as potentially driving training provision might have been expected to dominate the results. Company size, however, did not show itself to correlate with training provision as expected. The lack of a discernible pattern in the provision of training provided by companies of different sizes, might reflect the transitioning Vietnamese economy, as it shifts from a centralised, controlled economy to a market economy. In such a context, it might be the case that bulk of local companies are adopting human resource development practices at different rates, and as such any size effect remains undetected.

In the midst of such little support for training, in the form of infrastructure such as training departments, and the ongoing process of marketisation and increased levels of foreign investment, it is perhaps not surprising that foreign capital exercises a particular impact on training provision and manager attitudes in Vietnam. A higher evidence of training was detected among foreign invested companies than in other company types. Furthermore, managers indicated positive attitudes towards training and the utility of training for a series of strategic purposes. Company ownership was a greater predictor of the strength of positive company attitudes by managers with the managers of foreign-invested companies demonstrating more positive attitudes towards training than managers in other company types.

While foreign capital is presently a significant driver of training, and hopefully leading a change in attitude toward training provision, it is not clear that this will be enough to overcome the challenges present in an economy that continues to grow at relatively high rates. The strategies currently being deployed by the industry to assists its capacity to sustain industry growth and increased investment in infrastructure are perhaps not adequate if the role of construction is to maintain its place as one of the important sectors in the expanding Vietnamese economy. Indeed, the quantum and quality of training is presently insufficient to meet the workforce needs. Looking back at the recruitment difficulties commonly faced by companies is instructive. Recruiting managers and senior administrators was nominated as challenging, while there were also significant recruitment difficulties associated with occupations where underlying qualifications are required, including professionals and technical and scientific staff. This simple finding of the thesis should not be underestimated, as managers of construction companies in Vietnam themselves confirmed that skilled labourers are essential for their companies' long-term competitive advantage and business success, and that training is a useful approach for improving employees' skills.

This dissonance between the evidence of skill shortages and the pattern of training suggests that further investment in training is required. At the immediate level this invokes consideration of the proportion of internal company resources that are allocated to training and the priority training is afforded in strategic planning and resource allocation. More broadly there are considerations of whether the training that does occur is systematic and whether the available resources, including state policy, are addressing the deficits in training. On this question of state policy, the commonly identified skill shortages raise questions of the level, accessibility and suitability of the external support that is available to construction companies. Furthermore, the capacity for public-private partnerships for training support and delivery is a natural consideration, particularly in the context of a transitioning economy. Any sustained program of policy renewal and investment in training would need to address the project-based nature of work in construction, and also the current reliance of the industry on labour drawn from rural areas. These are certainly difficult issues, but the government and the industry will need to find solutions if the sector continues to expand.

Before turning to specific recommendations, which will attempt to address the challenges identified above, it is worthwhile to make a final comment on the unique nature of the case under study. It is highly likely that Vietnam itself represents a special case at the present time, wherein a study of training practices presents its own a mix of both challenges and benefits. It is an economy undergoing a structural change, and large numbers of companies continue to benefit from, and struggle with, the changing business climate. Commercial opportunities are plentiful, as the economy is growing at strong rates, and construction remains an industry in high demand. Yet competition for resources is also expanding, and foreign capital is a threat that remains pervasive. Completing the study at this time is challenging. As has been stressed throughout, the transition in the economy has no doubt shaped the findings, even in ways that cannot be easily understood at this time. While this is a challenge, it is also an opportunity. The thesis has been successful in identifying a circumstance of skilled labour shortages, and the advent of surprisingly positive attitudes toward training, particularly as a product of the recent international influence within the industry. This offers a chance to influence policy at critical time, before the shortage threatens to become an industry crisis, and while the growth rate continues to sustain demand for newly trained laborers keen to shift from rural to urban areas. The next section presents a number of recommendations that might contribute to this process.

#### **6.3 Recommendations for practice**

The skill shortages in the construction industry identify key areas of policy and practice focus for the Vietnamese government and Vietnamese construction companies.

Firstly, the Vietnamese government should support further research into the relationship between ongoing skill shortages in the construction industry and the pattern of training provision. This research should be designed to assess the capacity of the Vietnamese education and training system to support the development of skilled entrants to the construction industry. The research should assess also those factors that enable and hinder effective training practice within the construction industry. Secondly, the Vietnamese government should systematically examine the resources that are available to support training in the construction industry. Noting the pattern of skill shortages in the industry and the lack of recourse to external funds to support training, the government should assess the accessibility of state support for training to a wide range of companies, including local private companies and joint-stock companies. This support could potentially be made available in a number of forms including direct financial resources, wage subsidies and concessional access to training provided through state sponsored institutions. This examination should include consideration of publicprivate partnerships arrangement to support training to remedy ongoing skill shortages.

Thirdly, the Vietnamese government should assess the benefits of a training development levy whereby construction industry companies would be required to set aside a certain proportion of funds to support employee training yearly. If this were to be implemented, its effective deployment would be supported through the recommendations identified above. The benefits of this levy would be increasing the available resources that are available for training that would be directed specifically to training.

Fourthly, the Vietnamese government should facilitate a number of forums to assist construction companies assess whether their approach to training is sufficiently systematic. This would examine the potential for training to address skill shortages through human resource development practice. These forums would examine also those factors that enable and hinder effective training culture and practice and assist construction industry companies address the particular features of the industry. This would include, for example, the requirements of project based work.

Fifthly, the onus of responsibility does not only fall to government. Construction companies evidence an incomplete approach to training and continue to be confronted by skill shortages. A more systematic approach to training including its organisation and resourcing is required.

#### 6.4 Limitations of the thesis and recommendations for future research

In considering these findings a number of limitations are evident which should be considered during further study.

Firstly, this thesis used a cross-sectional design and was carried out in a specific time period in Vietnam. The aim of the thesis was to explore training practices in the Vietnamese construction industry and to examine the relationship between training provision and company size, company ownership and the attitudes of managers towards employee training provision. A future study should accommodate a longitudinal research design to evaluate in more detail the decisions to invest in training and the effectiveness of each type of employee training. Future study could also examine profitability outcomes form the range of company variables examined in this thesis; is there a particular combination of training and company characteristics that induce stronger profits?

Secondly, data collection for this thesis employed a survey conducted via email and telephone. The advantages of this data collection method is that it is cost effective for the researcher and places a limited time demand on the respondents in terms of the time required to answer the questions when convenient. However, this method provides a very limited means to assess whether respondents understand the questions intended by the researcher, acknowledging that the questionnaire was piloted prior to the formal research. To address this limitation, further research through face-to-face or in-depth interviews would enable a more detailed examination of the decisions by construction companies to invest in training, in addition to the particular deployment of their training, why particular types of training are favoured, why particular occupations or skill deficits are targeted and what particular constraints are evident. It would also enable through an appropriate case-study analysis a more detailed examination of the combined impact of company size and company ownership. In response to the findings about the absence of sophisticated training infrastructure or departments, further research could also be

directed to assessing who organises, monitors and measures the outcomes of the training,

Lastly, this thesis was focused on the construction industry in a specific and limited location, this being construction industry companies in Ho Chi Minh City. Although this is the largest city in Vietnam, Vietnam still has many other major cities such as Hanoi, Da Nang and Can Tho. It is important to assess whether construction industry companies in those cities demonstrate a similar or different pattern of training provision and attitudes towards training as were evident in Ho Chi Minh City. Therefore, further research is recommended in major cities in Vietnam with a view to establishing a wider research base from which to generate more comprehensive findings about the construction industry in Vietnam.

Appendices

## **Appendix A: Recommendation Letter**

Locked Bag 1797 Penrith NSW 2751 Australia



September 26th 2012

#### **RECOMMENDATION LETTER**

To whom it may concern:

Please find enclosed a survey form to assist Mr. Huynh Quang Minh in completing his Doctor of Business Administration at the University of Western Sydney, Australia.

This study focuses on exploring training practice, and management perceptions about employee training approaches for human resource development in construction companies in Vietnam. The research results may be publishable in international journals. However, your responses to the survey will remain anonymous and confidential. There are no foreseeable risks to you.

As described below, the survey is consigned to Truong Doan Company Limited, Ho Chi Minh City, Vietnam to collect opinions of management staff at construction companies in Vietnam.

#### Survey agency:

Ms. Le Vu Khai Anh, Research Director Truong Doan Company Limited 73 Street No. 3 Cu Xa Do Thanh District 3, HCMC, Vietnam Phone: +84 8 3929 3233 Fax: +84 8 3929 3243 Email: <u>anh@truongdoan.com.vn</u> URL: <u>http://www.truongdoan.com.vn</u>

We appreciate very much your voluntary participation to support to Mr. Huynh Quang Minh's research by filling in the survey form and return to the survey agency as soon as you can.

Yours faithfully,

TERRY SLOAN Associate Professor HDR Director, School of Business

HUYNH QUANG MINH Doctoral Student Email: minh.itcgroup@gmail.com

#### **Appendix B: Recommendation Letter (Vietnamese)**

Locked Bag 1797 Penrith NSW 2751 Australia



Ngày 26 tháng 09 năm 2012

#### THƯ GIỚI THIỆU

Kính gửi Ban Giám Đốc Quí Công Ty:

Chúng tôi xin được đính kèm theo đây là bản khảo sát cho một nghiên cứu của Ông Huỳnh Quang Minh, hiện đang là Nghiên cứu sinh của Chương trình Tiến sĩ Quản trị Kinh doanh tại Trường Đại Học UWS (University of Western Sydney), Úc.

Khảo sát này tập trung thu thập thông tin về thực tế đào tạo cán bộ nhân viên và ý kiến của nhà quản lý đối với các hình thức đào tạo phát triển nguồn nhân lực được áp dụng cho các doanh nghiệp ngành xây dựng tại Việt Nam. Kết quả nghiên cứu này có thể được công bố trên tạp chí khoa học quốc tế. Tuy nhiên, dữ liệu thu thập được từ việc trả lời của Quí công ty cho khảo sát này đều được mã hóa và bảo mật. Cho nên không có ảnh hưởng xấu gì đến Quí Công ty hay đến cá nhân người tham gia nghiên cứu này.

Như được nêu dưới đây, khảo sát này được giao cho Công ty TNHH Trương Đoàn (TP. Hồ Chí Minh, Việt Nam) thực hiện việc thu thập ý kiến của lãnh đạo các phòng ban của các công ty xây dựng tại Việt Nam.

#### Đơn vị nghiên cứu thực hiện cuộc khảo sát:

Bà Lê Vũ Khai Anh, Giám đốc nghiên cứu Công ty TNHH Trương Đoàn 73 Đường Số 3, Cư Xá Đô Thành, Quận 3, TP.HCM, Việt Nam Điện thoại: +84 8 3929 3233 Fax: +84 8 3929 3243 Email: anh@truongdoan.com.vn

URL: http://www.truongdoan.com.vn

Chúng tôi xin chân thành cảm ơn Quí Công Ty nhiệt tình tham gia hỗ trợ cho nghiên cứu của Ông Huỳnh Quang Minh bằng cách điền vào bản khảo sát này và gửi lại cho đơn vị nghiên cứu trong thời gian sớm nhất có thể.

Trân trọng,

41091 1210

TERRY SLOAN

TERRY SLOAN Phó Giáo Sư Giám đốc Chương trình Sau Đại Học

HUÌNH QUANG MINH Nghiên cứu sinh Tiến sĩ Email: minh.itcgroup@gmail.com

# Appendix C Questionnaire

This questionnaire is designed to find out the training practices of construction companies in Vietnam. The finding would be used for the purpose of research only and the information data will be kept confidential. There is no right or wrong answers. Therefore, we would be grateful if you could answer all the questions truthfully.

*Please answer the following questions by marking 'X', circling or yellow highlighting the numbers relating to your answers* 

# A. GENERAL INFORMATION (This information is used for classification only or for re-contact with you to clarify your answered if needed)

Name of the company	
Address	
	_ Postal Code
Country	
	Fax
Web site	
Email:	
Name of the person filling in this qu	estionnaire
Position:	Department:

# Q1. What are the **fields of business** of your company?

Business fields	Code	Business fields	Code
	1	Construction Consulting	3
Construction Designer/Architecture	2	Real estate	4
□ Other (please specify):	·		·

# Q2. What is the **business form** of your company? (Single answer)

Business form	Code	Business form	Code
□ State own company	1	□Joint venture company	4
Local private company	2	Joint stocks company	5
□ 100% FDI (foreign direct investment) company	3	3 □ Other (please specify):	

Q3. How many employees are there in your company?

Please specify the number \_\_\_\_\_ employees,

and circle one code number below in accordance with the number of employees.

Number of employees	Code
10 employees or fewer	1
Between over 10 and 200	2
Between over 200 and 300	3
Over 300	4

# **B. MAIN QUESTIONS**

Q4. Is there a specific **department or unit responsible for training** in your company?

	Code
Yes	1
No	2

Q5. Has **your company received sponsor or subsidy** from any organisations for training employee?

	Code	
Yes	1	If 'Yes', please answer the Q.6
No	2	If 'No', please skip the Q.6, and go to answer the Q7.

Q6. What are the sponsor/subsidized organisations belonging to? (multiple answers)

Organisations	Code
Government organisation	1
Private organisation	2
Foreign organisation	3
Other (please specify)	

- Q7. Please answer the following questions by circling the code of each row (staff/occupation) in related to the questions Q7a and Q7b in each column (multiple answers for each question)
- Q7a. What are the kinds of staff/occupations that your company has faced **difficulty in recruitment** from the labour market?
- Q7b. What are the kinds of staff/occupations that your company has **funded or arranged any (off-the-job, on-the-job) training** over the past 12 months?

Staff/Occupations	Q7a	Q7b	
	Difficult to recruit	Training	
1. Managers & Senior Administrators	1	1	
2. Professionals	2	2	
3. Technical and Scientific Staff	3	3	
4. Clerical and Secretarial Staff	4	4	
5. Craft and Skilled Operatives	5	5	
6. Personal Services and Sales Staff	6	6	
7. Operatives and Assembly Staff	7	7	
8. Other Manual Workers	8	8	
9. None of staff/occupation above	9	9	
(Note: if code 9 is selected, other codes should not be selected)			

Q8. What are the **training types** that your company has applied for each **kind of occupations or staff** in your company? *Please circle the code of each row in related to the occupations/staff in each column* (*multiple answers*)

**On-the-Job training**: It means training given at the desk or place where the person usually works.

**Off-the-Job training**: All training away from the immediate work position. It can be given at your premises or elsewhere. It includes all sorts of courses – full or part time; correspondence or distance learning; health and safety training, and so on – as long as it is funded or arranged by your company

# Note: For each kind of the staff/ occupations answered in Q7b (training), please answer accordingly

*in Q8.* 

	Types of Occupations/Staff							
Training types	Managers & senior administrators	Professionals	Technical and scientific staff	Clerical and secretarial staff	Craft and skilled operatives	Personal services and sales staff	Operatives and assembly staff	Other manual workers
Off-the-job training								
On-site								
1. Lecture	1	1	1	1	1	1	1	1
2. Group discussion	2	2	2	2	2	2	2	2
3. Role playing	3	3	3	3	3	3	3	3
4. Sensitivity training	4	4	4	4	4	4	4	4
5. Video tapes	5	5	5	5	5	5	5	5
6. Simulations	6	6	6	6	6	6	6	6

7. Case study	7	7	7	7	7	7	7	7
8. Computer software	8	8	8	8	8	8	8	8
9. Internet teaching	9	9	9	9	9	9	9	9
Off-site								
10. College/university courses	10	10	10	10	10	10	10	10
11. Vocational school courses	11	11	11	11	11	11	11	11
12. Overseas workshops	12	12	12	12	12	12	12	12
On-the- job training								
13. Job rotation	13	13	13	13	13	13	13	13
14. Apprenticeships	14	14	14	14	14	14	14	14
15. Assigning trainee as member of task force	15	15	15	15	15	15	15	15
16. Other (please specify):								

# MANAGERIAL OPINIONS ABOUT EMPLOYEE TRAINING TYPES

Q9. Please indicate the level which you agree with the following statements about training on-the-job and off-the-job by circling one number only for each statement of 'on-the-job' and one number only for 'off-the-job'.

Please use the following scale for your answer

1	2	3	4	5
Strongly disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree

**On-the-Job training**: It means training given at the desk or place where the person usually works.

**Off-the-Job training**: All training away from the immediate work position. It can be given at your premises or elsewhere. It includes all sorts of courses – full or part time; correspondence or distance learning; health and safety training, and so on – as long as it is funded or arranged by your company

Note: For each of the following statements, please choose one single answer for each column: on-the-job and off-the-job.

This question is aimed at asking your opinion. Please answer basing on your opinion regardless if the training is done at your company or not.

Statements		On-the-Job				Off-the-Job				
On-the-job/off-the-job is	(Single answer)			(Single answer)			r)			
1)contributing to improve <b>productivity</b> of my	1 2 3 4 5		1	2	3	4	5			

Statements	On-the-Job			Off-the-Job						
On-the-job/off-the-job is	(Single answer)			(Single answer)						
company										
2)improving employee performance	1	2	3	4	5	1	2	3	4	5
3)helping my company to achieve its <b>strategic</b>	1	2	3	4	5	1	2	3	4	5
aims										
4)increasing sustainable <b>competitive advantages</b>	1	2	3	4	5	1	2	3	4	5
5)the most effective way to increase <b>employee</b>	1	2	3	4	5	1	2	3	4	5
skills										
6)the most appropriate training <b>approach for my</b>	1		2		~	1				~
company	1	2	3	4	5	1	2	3	4	5
7)achieving greater return on training investment	1	2	3	4	5	1	2	3	4	5
8)to build the company <b>specific human resources</b>	1	2	3	4	5	1	2	3	4	5
9)increasing <b>positive attitudes</b> of employees such										
as job satisfaction of employee, commitment	1	2	3	4	5	1	2	3	4	5
10)waste of <b>money</b>	1	2	3	4	5	1	2	3	4	5
11)encouraging staff turnover	1	2	3	4	5	1	2	3	4	5
12) the needs for <b>innovation</b>	1	2	3	4	5	1	2	3	4	5
13) to meet <b>business changes</b>	1	2	3	4	5	1	2	3	4	5
14) Other (please specify):	1	2	3	4	5	1	2	3	4	5
	I	I	I	I	I		I	I	I	

# C. BIO-DATA

Q10. What is your **age**? \_\_\_\_\_

•	
Ages	Code
Under 20	1
20-29	2
30-39	3
40-49	4
50-59	5
60 and over 60	6

Q11. Your gender:

Male	1
Female	2

Q12. What is the **highest level of education** that you achieve?

Education	Code
Primary school	1
Secondary school	2
High school	3
College	4
University	5
Postgraduate	6

Q13. The following questions are asking about your working experience. Please circle the number of each row in related to the questions in each column

Q13a. How many years of working experience do you have?

O13b.	How many	years do you	ı have <b>in the</b>	managerial	positions?
Q150	110 w many	jeurs de jee		manageria	positions.

	Q13a.	Q13b.
	Working experience	Managerial positions
Under 1 year	1	1
1-3 years	2	2
4-6 years	3	3
7-9 years	4	4
10-12 years	5	5
Over 12 years	6	6

(Note: years in managerial position should be equal or less than years of working experience)

Thank you for your cooperation!

# Appendix D Questionnaire (Vietnamese)

# **BẢN CÂU HỎI**

Bản câu hỏi này được thiết kế cho mục đích nghiên cứu thực tế đào tạo nguồn nhân lực của các công ty ngành xây dựng tại Việt Nam. Dữ liệu thu thập được chỉ dùng cho mục đích nghiên cứu và được bảo mật. Không có câu hỏi trả lời đúng hay sai trong bản câu hỏi này. Vì thế ông/bà vui lòng trả lời những câu hỏi sau đây một cách thẳng thắn và đúng sự thật.

Vui lòng trả lời các câu hỏi sau bằng cách đánh dấu X, khoanh tròn hoặc highlight màu vàng mã số của trả lời tương ứng.

A. THÔNG TIN CHUNG (các thông tin này chỉ dùng để phân loại khi phân tích, hoặc để chúng tôi dễ dàng liên lạc lại khi cần làm rõ câu trả lời của Ông/Bà)

Tên công ty : (	vui lòng ghi rõ tên công ty)	
Địa chỉ:	Mã số vùng:	
Điện thoại :		Fax:
Website :		
Email:		
Họ tên người trả	ả lời bản câu hỏi này:	
Chức vụ:	Phòng/Ban:	

Q1. Lĩnh vực kinh doanh của công ty ông/bà là gì? (có thể chọn nhiều trả lời)

Lĩnh vực kinh doanh	Mã	Lĩnh vực kinh doanh	Mã
Xây dựng	1	Tư vấn xây dựng	3
Thiết kế xây dựng / Kiến trúc	2	Bất động sản	4
Khác (vui lòng ghi rõ):			

Q2. Công ty của ông/bà được thành lập theo**hình thức công ty** gì? (chọn một trả lời)

Hình thức công ty	Mã	Hình thức công ty	Mã
Công ty nhà nước	1	Công ty liên doanh	4
🗆 Công ty tư nhân	2	Công ty cổ phần	5
□ Công ty 100% vốn đầu tư nước ngoài	3	Khác (vui lòng ghi rõ):	6

Q3. Công ty ông/bà có bao nhiêu nhân viên/người lao động?

Vui lòng ghi rõ tổng số \_\_\_\_\_nhân viên/người lao động (ví dụ: 120 người)

và khoanh vào một mã số bên dưới tương ứng với số lượng nhân viên/người lao động này.

Số lượng lao động	Mã
10 lao động hoặc ít hơn	1
Trên 10 người đến 200 người	2
Trên 200 người đến 300 người	3
Trên 300 người	4

# **B. CÂU HỎI CHÍNH**

Q4. Công ty của ông/bà có **phòng ban** hay **bộ phận chuyên phụ trách đào tạo** nhân viên không?

	Mã
Có	1
Không	2

Q5. Từ trước đến nay, công ty của ông/bà có nhận bất kỳ **nguồn tài trợ** từ bất kỳ tổ chức nào cho việc đào tạo nhân viên của công ty ông/bà hay không?

	Mã	
Có	1	Nếu 'có', vui lòng trả lời tiếp câu Q6
Không	2	Nếu 'không', vui lòng bỏ qua câu Q6, và trả lời tiếp câu Q7

Q6. Đơn vị tài trợ cho đào tạo nhân viên của công ty ông/bà thuộc tổ chức nào sau đây? (có thể chọn nhiều trả lời)

Tổ chức	Mã
Tổ chức chính phủ	1
Tổ chức tư nhân	2
Tổ chức nước ngoài	3
Khác (vui lòng ghi rõ)	

- Q7. Ghi nhận trả lời cho từng câu Q7a và Q7b vào cột tương ứng trong bảng dưới đây. (có thể chọn nhiều trả lời cho mỗi câu)
- Q7a. Đối với công ty của ông/bà, nhân viên/ nghề nghiệp nào **khó tuyển dụng** từ thị trường lao động?
- Q7b. Trong 12 tháng qua, nhân viên/nghề nghiệp nào được công ty ông/bà **tài trợ hoặc** sắp xếp cho đào tạo (kể cả tại nơi làm việc hoặc ngoài nơi làm việc)?

Nhân viên/nghề nghiệp	Q7a Khó tuyển dụng	Q7b Đào tạo
Quản lý & quản trị viên cao cấp	1	1
Đội ngũ chuyên nghiệp	2	2
Nhân viên khoa học kỹ thuật	3	3
Nhân viên văn phòng và thư ký	4	4
Công nhân lành nghề	5	5
Đội ngũ bán hàng và dịch vụ	6	6
Đội ngũ nhân viên lắp đặt	7	7
Lao động phổ thông	8	8
Không nhân viên/nghề nghiệp nào nêu trên	9	9
(lưu ý: nếu đã chọn mã số 9 thì sẽ không	chọn bất kỳ mã số nào	từ 1-8)

Q8. Cho mỗi loại **nhân viên/nghề nghiệp** sau đây, vui lòng cho biết công ty ông/bà áp dụng **loại hình đào tạo** nào?*Vui lòng khoanh mã trả lời tương ứng cho từng loại nhân viên / nghề nghiệp*.

(có thể chọn nhiều trả lời cho mỗi loại nhân viên / nghề nghiệp.)

**Đào tạo tại nơi làm việc**: có nghĩa là đào tạo được thực hiện tại văn phòng hoặc nơi người lao động thường làm việc.

**Đào tạo ngoài nơi làm việc:** tất cả đào tạo ngoài nơi làm việc. Có thể tại công ty hoặc nơi khác. Bao gồm những khoá học - toàn thời gian hoặc bán thời gian; học hàm thụ hoặc học từ xa; đào tạo về an toàn lao động, ...- được công ty của ông/bà tài trợ hoặc sắp xếp đào tạo.

Lưu ý: Với những nhân viên/ nghề nghiệp mà ông/bà đã có trả lời ở Q7b (đào tạo) thì vui lòng trả lời tương ứng tiếp theo ở câu Q8.

	Loại nhân viên/nghề nghiệp								
	Quần lý & quần trị viên cao cấp	Đội ngũ chuyên nghiệp	Nhân viên khoa học kỹ thuật	Nhân viên văn phòng & thư ký	Công nhân lành nghề	Đội ngũ bán hàng và dịch vụ	Đội ngũ nhân viên lắp đặt	Lao động phổ thông	
Loại đào tạo	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Đào tạo ngoài nơi làm việc									
Tại công ty									
1. Bài giảng	1	1	1	1	1	1	1	1	
2. Thảo luận nhóm	2	2	2	2	2	2	2	2	
3. Đóng vai	3	3	3	3	3	3	3	3	
4. Ứng xử	4	4	4	4	4	4	4	4	
5. Xem video	5	5	5	5	5	5	5	5	
6. Mô phỏng	6	6	6	6	6	6	6	6	
7. Tình huống	7	7	7	7	7	7	7	7	
8. Phần mềm vi tính	8	8	8	8	8	8	8	8	
9. Đào tạo qua internet	9	9	9	9	9	9	9	9	
Ngoài công ty									
10. Khóa học ở trường cao đẳng/đại học	10	10	10	10	10	10	10	10	
11. Khóa học ở trường dạy nghề	11	11	11	11	11	11	11	11	

	Loại nhân viên/nghề nghiệp								
	Quần lý & quần trị viên cao cấp	Đội ngũ chuyên nghiệp	Nhân viên khoa học kỹ thuật	Nhân viên văn phòng & thư ký	Công nhân lành nghề	Đội ngũ bán hàng và dịch vụ	Đội ngũ nhân viên lắp đặt	Lao động phổ thông	
Loại đào tạo	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
12. Huấn luyện ở nước ngoài	12	12	12	12	12	12	12	12	
Khác (vui lòng ghi rõ):									
Đào tạo tại nơi làm việc									
13. Xoay vòng công việc	13	13	13	13	13	13	13	13	
14. Học việc, học nghề	14	14	14	14	14	14	14	14	
15. Phân công người được đào tạo như thành viên của lực lượng làm việc	15	15	15	15	15	15	15	15	
Khác (vui lòng nêu rõ):									
Ý KIẾN CỦA NGƯỜI QUẢN LÝ VỀ LOẠI HÌNH ĐÀO TẠO NHÂN VIÊN									

Q9. Vui lòng xác định mức độ ông/bà đồng ý với từng câu nói sau đối với việc đào tạo tại nơi làm việc và ngoài nơi làm việc bằng cách **khoanhtròn một số duy nhất cho mỗi câu** dưới cột '**đào tạo tại nơi làm việc**' và **một số duy nhất cho mỗi câu** dưới cột '**đào tạo tại nơi làm việc**'.

Vui lòng sử dụng thang đo mức độ như sau để trả lời:

1	2	3	4	5
Rất không đồng ý	Không đồng ý	Không ý kiến	Đồng ý	Rất đồng ý

**Đào tạo tại nơi làm việc**: có nghĩa là đào tạo được thực hiện tại văn phòng hoặc nơi người lao động thường làm việc.

**Đào tạo ngoài nơi làm việc**: tất cả đào tạo ngoài nơi làm việc. Có thể tại công ty hoặc nơi khác. Bao gồm những khoá học - toàn thời gian hoặc bán thời gian; học hàm thụ hoặc học từ xa; đào tạo về an toàn lao động, ...- được công ty của ông/bà tài trợ hoặc sắp xếp đào tạo.

Lưu ý:Với mỗi câu nói sau, vui lòng chọn 01 trả lời tương ứng cho từng cột: tại nơi làm việc và ngoài nơi làm việc. Câu hỏi này chỉ muốn biết về quan điểm của ông/bà, do đó không quan trọng việc hiện nay cơ quan ông/bà có ổ chức đào tạo tại nơi làm việc hay ngoài nơi làm việc hay không.

Các câu nói										
	Т	ại no	ri là	m vi	ệc	Ngoài nơi làm việc				
Đào tạo tại nơi làm việc/ngoài nơi làm việc thì		hỉ kh lời ch				(chỉ khoanh một trả lời cho mỗi câu)				
1)góp phần tăng năng suất của công ty	1	2	3	4	5	1	2	3	4	5
2)hoàn thiện khả năng làm việc của nhân viên	1	2	3	4	5	1	2	3	4	5
3)giúp công ty đạt được những mục tiêu chiến lược	1	2	3	4	5	1	2	3	4	5
4)nâng cao lợi thế cạnh tranh bền vững	1	2	3	4	5	1	2	3	4	5
5)cách hiệu quả nhất nâng cao kỹ năng nguời lao động		2	3	4	5	1	2	3	4	5
6)cách đào tạo hợp lý nhất đối với công ty tôi		2	3	4	5	1	2	3	4	5
7)thu hồi lớn hơn khi đầu tư đào tạo nhân viên	1	2	3	4	5	1	2	3	4	5
8)xây dựng nguồn nhân lực đặc biệt cho công ty	1	2	3	4	5	1	2	3	4	5
<ul> <li>9)tăng thái độ tích cực của người lao động như thoả mãn công việc, cam kết gắn bó với công ty</li> </ul>		2	3	4	5	1	2	3	4	5
10)lãng phí tiền bạc	1	2	3	4	5	1	2	3	4	5
11)khuyến khích nhân viên nghỉ việc	1	2	3	4	5	1	2	3	4	5
12) cần thiết cho đổi mới		2	3	4	5	1	2	3	4	5
13) đáp ứng sự thay đổi trong kinh doanh		2	3	4	5	1	2	3	4	5
14) Khác (vui lòng nêu rõ):	1	2	3	4	5	1	2	3	4	5

## C. CÂU HỎI PHÂN LOẠI

tuổi

Q10. Vui lòng cho biết tuổi của Ông/bà ? \_\_\_\_\_

 Độ tuổi
 Mã

 Dưới 20
 1

 20-29
 2

 30-39
 3

 40-49
 4

 50-59
 5

 Từ 60 trở lên
 6

Q11. Vui lòng cho biết giới tính của ông/bà?

Nam	1
Nữ	2

Q12. Vui lòng cho biết trình độ học vấn cao nhất của ông/bà?

Học vấn	Mã
Tiểu học (cấp 1)	1
Trung học cơ sở (cấp 2)	2
Phổ thông trung học (cấp 3)	3
Cao đẳng	4
Đại học	5
Sau đại học	6

Q13. Sau đây là các câu hỏi liên quan đến kinh nghiệm làm việc của ông/bà.Vui lòng khoanh tròn con số ở mỗi dòng tương ứng với câu hỏi ở mỗi cột

Q13a. Ông/bà có được **bao nhiêu năm kinh nghiệm** làm việc? Q13b. Ông/bà có **bao nhiêu năm ở vị trí quản lý**?

	Q13a.	Q13b.
	Kinh nghiệm làm việc	Vị trí quản lý
Dưới 1 năm	1	1
Từ 1 đến 3 năm	2	2
Từ 4 đến 6 năm	3	3
Từ 7 đến 9 năm	4	4
Từ 10 đến 12 năm	5	5
Trên 12 năm	6	6

(Lưu ý: số năm quản lý nên nhỏ hơn hoặc bằng số năm làm việc)

Chân thành cảm ơn ông/bà đã hợp tác!

## Appendix E

The attitudes of managers from different size, different ownership companies towards employee training provision– detailed analysis results

#### A. Attitudes of managers from different sized companies towards employee training types

The results of the one way analysis of variance (ANOVA) (with  $\alpha$  level = 0.05) together with the Tukey HSD multiple comparisons indicate the attitudes of managers in different sized companies towards each statement relating to employee training type as follow:

1. For the statement the employee training is (1) contributing to improve **productivity** of my company

The results (see Table 4.23) indicate that attitudes of managers in different sized companies are positive towards employee training provision for improving productivity of company, and the results **ANOVA:**  $\alpha =.430>0.05$  for on-the-job training and **ANOVA:**  $\alpha =0.219>0.05$  for off-the-job training (see the tables below) indicate attitudes are not significant difference regardless on-the-job or off-the-job training.

		Mean (On-the-job training)				
Code	Statements	1 Super small	2 Small	3 Medium	4 Large	
Q9a_1	1)contributing to improve <b>productivity</b> of my company	4.07	3.98	3.98	4.02	

#### ANOVA

#### Q9a\_1

	Sum of Squares	df	Mean Square	F	Sig.		
Between Groups	.789	3	.263	.923	.430		
Within Groups	144.162	506	.285				
Total	144.951	509					

		Mean (Off-the-job training)			
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9b_1	1)contributing to improve <b>productivity</b> of my company	3.92	3.86	3.90	4.01

#### ANOVA

Q9b_1					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.495	3	.498	1.481	.219
Within Groups	170.209	506	.336		
Total	171.704	509			

#### 2. For the statement the employee training is (2) improving employee performance

The results (see Table 4.23) indicate that attitudes of managers in different sized companies are positive towards employee training provision for improving employee performance regardless on-the-job or off-the-job training. In addition, the results (see the tables below) **ANOVA:**  $\alpha$  =.100>0.05 indicate that there is no significant difference from those attitudes in terms of on-the-job training. However, the results **ANOVA:**  $\alpha$  =0.02<0.05; and **Tukey HSD** indicate that there is significant difference between those attitudes in terms of off-the-job training. The large company (code 4) is more positive attitudes than small company (code 2) towards employee training for improving employee performance.

		Mean (On-the-job training)			
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9a_2	2)improving employee performance	4.05	4.05	4.00	4.16

#### ANOVA

Q9a\_2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.594	3	.531	2.094	.100
Within Groups	128.398	506	.254		
Total	129.992	509			

		Mean (Off-the-job training)			
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9b_2	2)improving employee performance	3.99	3.92	3.98	4.14

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.575	3	1.192	5.007	.002
Within Groups	120.417	506	.238		
Total	123.992	509			

**Post-Hoc Tests Multiple Comparisons** Q9b\_2

Tukey HSD

		Mean difference			95% Confide	ence interval
(I) Q3	(J) Q3	(I-J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.091	.060	.435	06	.25
	3	.016	.062	.994	14	.18
	4	139	.063	.119	30	.02
2	1	091	.060	.435	25	.06
	3	075	.060	.593	23	.08
	4	230*	.060	.001	39	08
3	1	016	.062	.994	18	.14
	2	.075	.060	.593	08	.23
	4	155	.062	.061	32	.00
4	1	.139	.063	.119	02	.30
	2	.230*	.060	.001	.08	.39
	3	.155	.062	.061	.00	.32

\* The mean difference is significant at the 0.05 level.

**Results:** Code 4 (Large company) > Code 2 (Small company).

**3.** For the statement the employee training is (3) helping my company to achieve its **strategic aim** 

Based on company size, the results (see Table 4.23) indicate that the attitudes of managers are positive towards employee training provision for achieving strategic aims regardless on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha =0.020<0.05$ ; and **Tukey HSD** indicate that there is significant difference between the attitudes between large company and small company. In which the large company (code 4) is more positive attitudes than small company (code 2) towards employee training for helping company to achieve its strategic aims.

		(0	Me On-the-jo	ean b training)	
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9a_3	3)helping my company to achieve its <b>strategic aims</b>	3.98	3.87	3.98	4.11

#### ANOVA

Q9a\_3

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.577	3	1.192	3.311	.020
Within Groups	182.227	506	.360		
Total	185.804	509			

#### Post-Hoc Tests

#### **Multiple Comparisons**

Q9a\_3 Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q3	(J) Q3	(I-J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.102	.074	.517	09	.29
	3	009	.077	.999	21	.19
	4	131	.077	.322	33	.07
2	1	102	.074	.517	29	.09
	3	111	.074	.435	30	.08
	4	233*	.074	.009	42	04
3	1	.009	.077	.999	19	.21
	2	.111	.074	.435	08	.30
	4	123	.076	.377	32	.07
4	1	.131	.077	.322	07	.33

## **Multiple Comparisons**

Q9a\_3 Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q3	(J) Q3	(I-J)	Std. error	Sig.	Lower bound	Upper bound
	2	.233*	.074	.009	.04	.42
	3	.123	.076	.377	07	.32

\* The mean difference is significant at the 0.05 level.

**Results:** Code 4 (Large company) > Code 2 (Small company).

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha = 0.000 < 0.05$ ; and **Tukey HSD** indicate that attitudes of managers in large companies (code 4) are more positive than super small (code 1) and small companies (code 2).

Code	Statements	Mean (Off-the-job training)				
Code	Statements	1	2	3	4	
		Super small	Small	Medium	Large	
Q9b_3	3)helping my company to achieve its <b>strategic aims</b>	3.79	3.75	3.89	4.03	

#### ANOVA

Q9b\_3

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.321	3	2.107	6.030	.000
Within Groups	176.795	506	.349		
Total	183.116	509			

## **Post-Hoc Tests**

### Multiple Comparisons

Q9b\_3

Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q3	(J) Q3	(I-J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.074	.073	.742	11	.26
	3	080	.076	.717	27	.12
	4	224*	.076	.017	42	03
2	1	074	.073	.742	26	.11
	3	154	.072	.147	34	.03
	4	299*	.073	.000	49	11
3	1	.080	.076	.717	12	.27
	2	.154	.072	.147	03	.34

#### **Multiple Comparisons**

Q9b\_3 Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q3	(J) Q3	(I-J)	Std. error	Sig.	Lower bound	Upper bound
	4	145	.075	.219	34	.05
4	1	.224*	.076	.017	.03	.42
	2	.299*	.073	.000	.11	.49
	3	.145	.075	.219	05	.34

\* The mean difference is significant at the 0.05 level.

**Results:** Code 4 (Large company) > Code 1 (Super small company); Code 4 (Large company) > Code 2 (Small company).

4. For the statement the employee training is (4) increasing sustainable **competitive advantage** 

The results (see Table 4.23) indicate that attitudes of managers in different sized companies are positive towards employee training provision for increasing sustainable competitive advantages of company regardless of on-the-job or off-the-job training.

In terms of on-the-job training, the results (see the tables below) ANOVA:  $\alpha = 0.251 > 0.05$  indicate that there are not significant differences managerial attitudes between different sizes of companies.

		(		ean ob training)	
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9a_4	4)increasing sustainable competitive advantages	3.74	3.75	3.86	3.85

#### ANOVA

Q9a\_4

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.417	3	.472	1.372	.251
Within Groups	174.183	506	.344		
Total	175.600	509			

In terms of off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha = .037 < 0.05$  indicate nominally that attitudes of managers may be distinguishable by company size when checking ANOVA. Further checking with Tukey HSD, show significant differences in the attitudes of managers towards employee training provision for increasing sustainable competitive advantages between small and medium companies. The attitudes of managers in medium companies were more positive than the attitudes of managers in small companies (code 2).

		Mean (On-the-job training)			
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9b_4	4)increasing sustainable <b>competitive advantages</b>	3.76	3.74	3.92	3.89

### ANOVA

Q9b\_4

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.285	3	1.095	2.853	.037
Within Groups	194.184	506	.384		
Total	197.469	509			

## Post-Hoc Tests

## Multiple Comparisons

Q9b\_4 Tukey <u>HSD</u>

	-	Mean difference			95% Confide	ence interval
(I) Q3	(J) Q3	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.032	.077	.975	17	.23
	3	153	.079	.214	36	.05
	4	127	.080	.384	33	.08
2	1	032	.077	.975	23	.17
	3	186	.076	.070	38	.01
	4	159	.076	.159	36	.04
3	1	.153	.079	.214	05	.36
	2	.186	.076	.070	.00	.38
	4	.027	.079	.987	18	.23
4	1	.127	.080	.384	08	.33
	2	.159	.076	.159	04	.36
	3	027	.079	.987	23	.18

**Results:** Code 3 (Medium company) > Code 2 (Small company).

5. For the statement the employee training is (5) the most effective way to increase **employee** skills

The results (see Table 4.23) indicate that managers in different sized companies had positive attitudes towards employee training provision in terms of the most effective way to increase employee skills regardless on-the-job or off-the-job training.

Moreover, the results (see the tables below) **ANOVA:**  $\alpha =0.817>0.05$  for on-the job training and the Tukey results indicate that there are not significant differences in the attitudes of managers in different sized companies towards employee training provision in terms of the most effective way to increase employee skills for on-the-job training. However, **ANOVA:**  $\alpha =0.038<0.05$  and the Tukey results for off-the-job training, show a significant difference in the attitudes of managers of different sized companies. The attitudes of managers in medium companies (code 3) are more positive than those evident in small companies (code 2).

		(0		Iean ob training	g)
Code	Statements	1 Super small	2 Smal l	3 Mediu m	4 Large
Q9a_5	5)the most effective way to increase <b>employee</b> skills	3.69	3.77	3.74	3.70

#### ANOVA

Q9a\_5

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.538	3	.179	.311	.817
Within Groups	291.660	506	.576		
Total	292.198	509			

		Mean (Off-the-job training)			
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9b_5	5)the most effective way to increase <b>employee skills</b>	3.90	3.61	3.87	3.74

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.493	3	1.164	2.834	.038
Within Groups	207.910	506	.411		
Total	211.404	509			

#### **Post-Hoc Tests Multiple Comparisons** O9b 5

Q9b\_5 Tukey HSD

		Mean difference			95% Confide	ence interval
(I) Q3	(J) Q3	(I–J)	Std. Error	Sig.	Lower bound	Upper bound
1	2	.055	.079	.900	15	.26
	3	147	.082	.279	36	.06
	4	111	.082	.534	32	.10
2	1	055	.079	.900	26	.15
	3	202	.078	.051	40	.00
	4	166	.079	.154	37	.04
3	1	.147	.082	.279	06	.36
	2	.202	.078	.051	.00	.40
	4	.036	.082	.972	17	.25
4	1	.111	.082	.534	10	.32
	2	.166	.079	.154	04	.37
	3	036	.082	.972	25	.17

**Results**: Code 3 (Medium company) > Code 2 (Small company).

6. For the statement the employee training is (6) the most appropriate training **approach for my company** 

The results (see Table 4.23) indicate that attitudes of managers in different sized companies are positive towards employee training provision in terms of the most appropriate training approach for the company regardless of on-the-job or off-the-job training.

Moreover, the results (see the tables below) ANOVA:  $\alpha = .199 > 0.05$  and the results ANOVA:  $\alpha = .327 > 0.05$  indicate that there is no significant difference between the attitudes of managers in relation to on-the-job and off-the-job training.

		Mean(On-the-job training)				
Code	Code Statements		2 Small	3 Medium	4 Large	
Q9a_6	6)the most appropriate training <b>approach</b> <b>for my company</b>	3.71	3.69	3.74	3.56	

#### ANOVA

Q9a\_6

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.340	3	.780	1.556	.199
Within Groups	253.629	506	.501		
Total	255.969	509			

		(0	Me Off-the-Jo	ean b Training)	
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9b_6	6)the most appropriate training <b>approach</b> <b>for my company</b>	3.79	3.10	3.86	3.43

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.028	3	.676	1.154	.327
Within Groups	296.523	506	.586		
Total	298.551	509			

## 7. For the statement the employee training is (7) achieving greater return on training investment

The results (see Table 4.23) indicate that attitudes of managers in different sized companies are positive towards employee training provision for achieving a greater return on training investment regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha = 0.004 < 0.05$ ; and **Tukey HSD** indicate that attitudes of managers in medium companies (code 3) are more positive than the attitudes of managers in super small companies (code 1), and small companies (code 2).

		(0	Me n-the-Jo	ean b Training)	
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9a_7	7)achieving greater <b>return on training</b> <b>investment</b>	3.63	3.64	3.85	3.77

#### ANOVA

Q9a\_7

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.271	3	1.424	4.429	.004
Within Groups	162.633	506	.321		
Total	166.904	509			

## Post-Hoc Tests

### Multiple Comparisons

Q9a\_7 Tukey HSD

-	_	Mean difference			95% Confide	ence interval
(I) Q3	(J) Q3	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	013	.070	.998	19	.17
	3	$220^{*}$	.072	.013	41	03
	4	142	.073	.206	33	.05
2	1	.013	.070	.998	17	.19
	3	$207^{*}$	.070	.016	39	03
	4	130	.070	.250	31	.05
3	1	$.220^{*}$	.072	.013	.03	.41
	2	.207*	.070	.016	.03	.39
	4	.078	.072	.705	11	.26
4	1	.142	.073	.206	05	.33
	2	.130	.070	.250	05	.31
	3	078	.072	.705	26	.11

#### **Multiple Comparisons**

Q9a\_7 Tukey HSD

		Mean difference			95% Confid	ence interval
(I) Q3 (J)	) Q3	(I–J)	Std. error	Sig.	Lower bound	Upper bound

\* The mean difference is significant at the 0.05 level.

**Results:** Code 3 (Medium company) > Code 1 (Super small company); Code 3 (Medium company) > Code 2 (Small company).

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha = 0.000 < 0.05$ ; and **Tukey HSD** indicate that the attitudes of managers in medium companies (code 3) are more positive than the attitudes of managers in small companies (code 2). The attitudes of managers in large companies (code 4) are more positive than the attitudes of managers in small companies (code 2).

		Mean (Off-the-Job Training)				
Code	Statements	1 Super small	2 Small	3 Medium	4 Large	
Q9b_ 7	7)achieving greater <b>return on training</b> <b>investment</b>	3.68	3.62	3.87	3.56	

#### ANOVA

Q9b\_7

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.897	3	2.966	8.337	.000
Within Groups	180.007	506	.356		
Total	188.904	509			

#### **Post-Hoc Tests**

#### Multiple Comparisons

Q9b\_7 Tukey HSD

		Mean difference			95% Confide	95% Confidence interval		
(I) Q3	(J) Q3	(I–J)	Std. error	Sig.	Lower bound	Upper bound		
1	2	.233*	.074	.009	.04	.42		
	3	060	.076	.862	26	.14		
	4	095	.077	.603	29	.10		
2	1	233*	.074	.009	42	04		
	3	292*	.073	.000	48	10		
	4	328*	.074	.000	52	14		

#### **Multiple Comparisons**

Q9b\_7 Tukey HSD

	Mean difference				95% Confide	95% Confidence interval		
(I) Q3	(J) Q3	(I–J)	Std. error	Sig.	Lower bound	Upper bound		
3	1	.060	.076	.862	14	.26		
	2	.292*	.073	.000	.10	.48		
	4	035	.076	.967	23	.16		
4	1	.095	.077	.603	10	.29		
	2	.328*	.074	.000	.14	.52		
	3	.035	.076	.967	16	.23		

\* The mean difference is significant at the 0.05 level.

**Results:** Code 3 (Medium company) > Code 2 (small company);

Code 4 (Large company) > Code 2 (small company).

## 8. For the statement the employee training is (8) to build the company **specific human** resources

The results (see Table 4.23) indicate that attitudes of managers in different sized companies are positive towards employee training provision for the purpose of building the company specific human resources regardless on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha = 0.006 < 0.05$ ; and **Tukey HSD** indicate that attitudes of managers in medium companies (code 3) are more positive than the attitudes of managers in small companies (code 2). For off-the-job training, the results ANOVA:  $\alpha = .180 > 0.05$  indicate that there is no significant difference in the attitudes of managers according to company size.

		Mean (On-the-job training)				
Code	Statements	1 Super small	2 Small	3 Medium	4 Large	
Q9a_8	8)to build the company <b>specific</b> <b>human resources</b>	3.72	3.67	3.88	3.84	

#### ANOVA

Q9a\_8

	Sum of squares	df	Mean square	F	Sig.
Between Groups	3.804	3	1.268	4.227	.006
Within Groups	151.811	506	.300		
Total	155.616	509			

#### Post-Hoc Tests Multiple comparisons

Q9a\_8 Tukey HSD

	-	Mean difference			95% Confide	ence Interval
(I) Q3	(J) Q3	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.050	.068	.882	12	.22
	3	161	.070	.098	34	.02
	4	117	.070	.343	30	.06
2	1	050	.068	.882	22	.12
	3	211*	.067	.010	38	04
	4	167	.068	.066	34	.01
3	1	.161	.070	.098	02	.34
	2	.211*	.067	.010	.04	.38
	4	.044	.070	.922	14	.22

## Multiple comparisons

Q9a\_8 Tukey HSD

	-	Mean difference			95% Confide	ence Interval
(I) Q3	(J) Q3	(I–J)	Std. error	Sig.	Lower bound	Upper bound
4	1	.117	.070	.343	06	.30
	2	.167	.068	.066	.00	.34
	3	044	.070	.922	22	.14

\* The mean difference is significant at the 0.05 level.

**Results:** Code 3 (Medium company) > Code 2 (Small company).

		Mean(Off-the-Job Training)				
Code	Statements	1 Super small	2 Small	3 Medium	4 Large	
Q9b_ 8	8)to build the company <b>specific human</b> <b>resources</b>	3.30	3.64	3.29	3.54	

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.999	3	.666	1.638	.180
Within Groups	205.541	505	.407		
Total	207.540	508			

**9.** For the statement the employee training is (9) increasing **positive attitudes** of employees such as job satisfaction of employee, commitment

The results (see Table 4.23) indicate that attitudes of managers in different sized companies are positive towards employee training provision for increasing factors such as the job satisfaction of employees, and employee commitment. These attitudes were evident regardless of whether the training was on-the-job or off-the-job training.

The results (see the tables below) ANOVA:  $\alpha = 0.396 > 0.05$  for on-the-job training and the results ANOVA:  $\alpha = .169 > 0.05$  for off-the-job training indicate that there are not significant differences in the attitudes of managers on the basis of the type of training.

			_	Mean job training	;)
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9a_9	9)increasing <b>positive attitudes</b> of employees such as job satisfaction of employee, commitment	3.90	3.95	3.97	4.02

#### ANOVA

Q9a\_9

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.831	3	.277	.992	.396
Within Groups	141.304	506	.279		
Total	142.135	509			

		Mean (Off-the-Job Training)				
Code	Statements	1 Super small	2 Small	3 Medium	4 Large	
Q9b_9	9)increasing <b>positive attitudes</b> of employees such as job satisfaction of employee, commitment	3.93	3.62	4.05	3.70	

#### ANOVA

#### Q9b\_9 Sum of Squares F df Mean Square Sig. 2.199 3 1.687 Between Groups .733 .169 219.919 506 .435 Within Groups Total 222.118 509

#### 10. For the statement the employee training is (10) waste of **money**

The results (see Table 4.23) indicate that the attitudes of managers in different sized companies are negative towards the statement that employee training provision is a waste of money. This attitude was evident regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha = 0.628 > 0.05$  indicate that there are not significant differences in the attitudes of managers in different sized companies towards the statement that employee training provision is a waste of money.

			Mean (On-the-job training)				
Code	Statements	(On-the-job training)					
		Super small	Small	Medium	Large		
Q9a_10	10)waste of money	1.69	1.68	1.78	1.69		

#### ANOVA

Q9a\_10

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.972	3	.324	.580	.628
Within Groups	282.497	506	.558		
Total	283.469	509			

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha =0.25<0.05$ ; and **Tukey HSD** indicate that the attitudes of managers in medium companies (code 3) are more negative than the attitudes of managers in small companies (code 2).

		Mean (Off-the-Job Training)				
Code	Statements	1 Super small	2 Small	3 Medium	4 Large	
Q9b_10	10)waste of <b>money</b>	1.72	2.33	1.32	1.96	

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.761	3	2.587	3.143	.025
Within Groups	416.404	506	.823		
Total	424.165	509			

### **Post-Hoc Tests Multiple Comparisons** Q9b\_10

Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q3	(J) Q3	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	079	.112	.896	37	.21
	3	.244	.116	.153	05	.54
	4	.113	.117	.767	19	.41
2	1	.079	.112	.896	21	.37
	3	.323*	.111	.020	.04	.61
	4	.192	.112	.315	10	.48
3	1	244	.116	.153	54	.05
	2	323*	.111	.020	61	04
	4	131	.115	.669	43	.17
4	1	113	.117	.767	41	.19
	2	192	.112	.315	48	.10
	3	.131	.115	.669	17	.43

\* The mean difference is significant at the 0.05 level.

**Results:** Code 2 (Small company) > Code 3 (Medium company).

#### 11. For the statement the employee training is (11) encouraging staff turnover

The results (see Table 4.23) indicate that managers in different sized companies identified a negative attitude towards the statement that employee training provision is encouraging staff turnover regardless of whether the training was on-the-job or off-the-job training.

The results (see the tables below) **ANOVA:**  $\alpha = .114 > 0.05$  for on-the-job training and the results **ANOVA:**  $\alpha = .470 > 0.05$  for off-the-job training indicate that there is no significant difference between company size in terms of on-the-job training and off-the-job training towards the statement that employee training provision is encouraging staff turnover.

		Mean (On-the-job training)				
Code	Statements	1 Super small	2 Small	3 Medium	4 Large	
Q9a_11	11)encouraging staff turnover	1.64	1.57	1.78	1.64	

#### ANOVA

Q9a\_11

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.137	3	1.046	1.991	.114
Within Groups	265.814	506	.525		
Total	268.951	509			

		(0	Me Off-the-jo	ean b training)	
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9b_1 1	11)encouraging staff turnover	1.72	1.99	1.24	1.63

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.278	3	.426	.844	.470
Within Groups	255.485	506	.505		
Total	256.763	509			

#### **12.** For the statement the employee training is (12) the needs for **innovation**

The results (see Table 4.23) indicate that attitudes of managers in different company sizes are positive towards employee training provision for the purposes of innovation regardless of whether the training was on-the-job or off-the-job training.

The results (see the tables below) ANOVA:  $\alpha =0.438>0.05$  for on-the-job training and the results ANOVA:  $\alpha =0.305>0.05$  for off-the-job training indicate that there are not significant differences in the attitudes of managers of different sized companies c in terms of on-the-job or off-the-job training.

		Mean (On-the job-training)			
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9a_12	12)the needs for <b>innovation</b>	4.10	4.1	4.23	4.16

#### ANOVA

Q9a\_12

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.548	3	.516	.905	.438
Within Groups	288.423	506	.570		
Total	289.971	509			

Cada	Statements	Mean (Off-the-job training)				
Code	Statements	1	2	3	4	
		Super small	Small	Medium	Large	
Q9b_12	12) the needs for <b>innovation</b>	4.22	3.91	4.68	4.13	

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.791	3	.597	1.211	.305
Within Groups	249.442	506	.493		
Total	251.233	509			

#### 13. For the statement the employee training is (13) to meet business changes

The results (see Table 4.23) indicate that the attitudes of managers in different sized companies are positive towards employee training provision for business changes regardless of whether the training was on-the-job or off-the-job training. In addition, the results (see the tables below) **ANOVA:**  $\alpha = 0.312 > 0.05$  for on-the-job training and the results **ANOVA:**  $\alpha = 0.186 > 0.05$  for off-the-job indicate that there are not significant differences in the attitudes of managers in different sized companies in terms of on-the-job and off-the-job training.

		()		ean b training)	
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9a_13	13)to meet <b>business changes</b>	4.13	4.06	4.22	4.06

#### ANOVA

Q9a\_13

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.415	3	.805	1.192	.312
Within Groups	341.760	506	.675		
Total	344.175	509			

		(0	Me Off-the-jo	ean b training)	
Code	Statements	1 Super small	2 Small	3 Medium	4 Large
Q9b_13	13)to meet <b>business changes</b>	4.19	3.91	4.68	4.11

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.483	3	.828	1.610	.186
Within Groups	260.035	506	.514		
Total	262.518	509			

## **B.** Attitudes of managers from different ownership companies towards employee training types

The results of the one way analysis of variance (ANOVA) (with the  $\alpha$  level = 0.05) together with the Tukey HSD multiple comparisons, the results indicate the attitudes of managers in companies of different ownership types towards each statement relating to employee training type as follow:

1. For the statement the employee training is (1) contributing to improve **productivity** of my company

The results (see Table 4.30) indicate that managers in companies of different ownership types identified positive attitudes towards employee training provision for **improving productivity** of company regardless on-the-job or off-the-job training.

For *on-the-job training*, the results (see the tables below) ANOVA:  $\alpha$ =0.36>0.05 indicate that there are no significant difference between those attitudes in terms of on-the-job training.

#### Q2&Q9a\_1

		Mean (On-the-job training)				
Code	Statement	(1) State- owned	(2) Local private	(3.5) FDI	(5) Joint- stock	
Q9a_1	1)contributing to improve <b>productivity</b> of my company	4.07	3.95	4.02	4.00	

#### ANOVA

Q9a\_1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.916	3	.305	1.073	.360
Within Groups	144.035	506	.285		
Total	144.951	509			

## Post-Hoc Tests

#### Multiple Comparisons

Q9a\_1 Tukey HSD

95% Confidence Interval Mean difference (I) Q2 (J) Q2 (I-J)Std. error Sig. Lower bound Upper bound 2 .120 .067 .286 -.05 .29 3.5 .056 .067 .837 -.12 .23 5 .072 .067 .701 -.10 .24 .05 2 1 -.120 .067 .286 -.29 .781 3.5 -.063 .067 -.24 .11 5 -.048.066 .890 -.22 .12 3.5 1 -.23 .12 -.056 .067 .837 2 .063 .067 .781 .24 -.11

#### **Multiple Comparisons**

Q9a\_1 Tukey HSD

Mean difference				95% Confide	ence Interval	
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
	5	.016	.066	.995	16	.19
5	1	072	.067	.701	24	.10
	2	.048	.066	.890	12	.22
	3.5	016	.066	.995	19	.16

However, for *off-the-job training*, the results (see the tables below) **ANOVA:** a=0.013<0.05; and Tukey HSD results indicate that there are significant differences in the attitudes of managers in companies of different ownership types, between state-owned companies and local private companies as well as between FDI companies and local private companies (code 1) identified more positive attitudes than those evident in local private companies. Managers in FDI companies identified more positive attitudes y (code 3.5) than those evident in local private companies (code 2).

#### Q2&Q9b\_1

		Mean (Off-the-job training)				
Code	Statement		(2) Private	(3.5) FDI	(5) Joint- Stock	
Q9b_1	1)contributing to improve <b>productivity</b> of my company	4.00	3.80	4.00	3.88	

## ANOVA

Q9b\_1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.604	3	1.201	3.616	.013
Within Groups	168.100	506	.332		
Total	171.704	509			

## Post-Hoc Tests

#### Multiple Comparisons

Q9b\_1

Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.198*	.073	.033	.01	.39
	3.5	.000	.073	1.000	19	.19
	5	.121	.072	.333	06	.31
2	1	198*	.073	.033	39	01
	3.5	198*	.072	.032	39	01
	5	077	.072	.705	26	.11
3.5	1	.000	.073	1.000	19	.19

## **Multiple Comparisons**

Q9b\_1 Tukey HSD

		Mean difference		-	95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
	2	.198*	.072	.032	.01	.39
	5	.121	.072	.329	06	.31
5	1	121	.072	.333	31	.06
	2	.077	.072	.705	11	.26
	3.5	121	.072	.329	31	.06

\* The mean difference is significant at the 0.05 level.

**Results**: Code 1 (state-owned companies)> code 2 (local private companies); Code 3.5 (FDI companies)> code 2 (local private companies). 2. For the statement the employee training is (2) improving employee performance

The results (see Table 4.30) indicate that managers in companies of different ownership types identified positive attitudes towards employee training provision for the purpose of improving **employee performance** of company, regardless of whether the training was on-the-job or off-the-job training.

For *on-the-job training*, the results (see the tables below) ANOVA:  $\alpha = .231 > 0.05$  indicate that there are no significant difference between those attitudes in terms of on-the-job training.

		Mean (On-the-job training)				
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- Stock	
Q9a_2	2)improving employee performance	4.14	4.03	4.04	4.04	

#### ANOVA

Q9a\_2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.097	3	.366	1.436	.231
Within Groups	128.895	506	.255		
Total	129.992	509			

However, for *off-the-job training*, the results (see the tables below) **ANOVA:**  $\alpha$ =0.001<0.05; and **Tukey HSD** indicate that there are significant differences in the attitudes of managers in state-owned companies compared to those in local private companies and joint-stock companies. Managers in state-owned companies (Code 1) identified more positive attitudes than those evident in local private companies (Code 2). Managers in state-owned companies identified more positive attitudes (Code 1) than those evident in joint-stock companies (Code 5).

		Mean (Off-the-job training)				
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- Stock	
Q9b_2	2)improving employee performance	4.14	3.90	4.00	3.97	

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.848	3	1.283	5.402	.001
Within Groups	120.144	506	.237		
Total	123.992	509			

**Post-Hoc Tests Multiple Comparisons** Q9b\_2

Tukey HSD

		Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.239*	.062	.001	.08	.40
	3.5	.144	.061	.089	01	.30
	5	.174*	.061	.022	.02	.33
2	1	239*	.062	.001	40	08
	3.5	095	.061	.406	25	.06
	5	065	.061	.708	22	.09
3.5	1	144	.061	.089	30	.01
	2	.095	.061	.406	06	.25
	5	.030	.061	.959	13	.19
5	1	174*	.061	.022	33	02
	2	.065	.061	.708	09	.22
	3.5	030	.061	.959	19	.13

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company) > Code 2 (Local private companies); Code 1 (State-owned company) > Code 5 (Joint-stock companies). **3.** For the statement the employee training is (3) helping my company to achieve its **strategic aims** 

The results (see Table 4.30) indicate that managers in companies of different ownership types identified positive attitudes towards employee training provision for achieving the strategic aims of the company regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that managers in state-owned companies (code 1) identified more positive attitudes compared to those evident in local private companies (code 2) and FDI (code 3.5) companies.

		Mea	n (On-the-	job train	ing)
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- Stock
Q9a_3	3)helping my company to achieve its <b>strategic aims</b>	4.19	3.87	4.00	3.86

#### ANOVA

Q9a\_3

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.898	3	2.966	8.484	.000
Within Groups	176.906	506	.350		
Total	185.804	509			

#### Post-Hoc Tests Multiple Comparisons

Q9a\_3

Tukey HSD

		Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.319*	.075	.000	.13	.51
	3.5	.192	.074	.050	.00	.38
	5	.328*	.074	.000	.14	.52
2	1	319*	.075	.000	51	13
	3.5	127	.074	.321	32	.06
	5	.009	.074	.999	18	.20
3.5	1	192	.074	.050	38	.00
	2	.127	.074	.321	06	.32
	5	.136	.073	.249	05	.33
5	1	328*	.074	.000	52	14
	2	009	.074	.999	20	.18
	3.5	136	.073	.249	33	.05

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-own company) > Code 2 (Local private company); Code 1 (State-owned company) > Code 3.5 (FDI companies).

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.003<0.05; and **Tukey HSD** indicate that managers in state-owned companies (code 1) identified more positive attitudes compared to those evident in joint-stock companies (code 5). The attitudes of managers in FDI companies (code 3.5) companies are more positive than those evident in joint-stock companies.

		Mean (Off-the-job training)				
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock	
Q9b_3	3)helping my company to achieve its <b>strategic aims</b>	3.98	3.84	3.92	3.71	

#### ANOVA

Q9b\_3

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.089	3	1.696	4.822	.003
Within Groups	178.027	506	.352		
Total	183.116	509			

## Post-Hoc Tests Multiple Comparisons

Q9b\_3 Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.135	.075	.275	06	.33
	3.5	.055	.075	.884	14	.25
	5	.264*	.074	.002	.07	.45
2	1	135	.075	.275	33	.06
	3.5	080	.075	.706	27	.11
	5	.129	.074	.300	06	.32
3.5	1	055	.075	.884	25	.14
	2	.080	.075	.706	11	.27
	5	$.209^{*}$	.074	.024	.02	.40
5	1	264*	.074	.002	45	07
	2	129	.074	.300	32	.06
	3.5	$209^{*}$	.074	.024	40	02

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company)>Code 5 (Joint-stock company); Code 3.5 (FDI company)> Code 5 (Joint-stock company).

# 4. For the statement the employee training is (4) increasing sustainable competitive advantage

The results (see Table 4.30) indicate that managers in companies of different ownership types identified positive attitudes towards employee training provision for the purpose of increasing the sustainable competitive advantages of the company regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.005<0.05; and **Tukey HSD** indicate that managerial attitudes of state-owned company (code 1) is more positive than private company (code 2); and managerial attitudes of FDI companies (code 3.5) is more positive than local private companies (code 2) towards the statement that employee training provision is for increasing sustainable competitive advantages.

		Mean (On-the-job training)				
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock	
Q9a_4	4)increasing sustainable <b>competitive</b> advantages	3.86	3.67	3.91	3.77	

#### ANOVA

Q9a\_4

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.425	3	1.475	4.360	.005
Within Groups	171.175	506	.338		
Total	175.600	509			

Post-Hoc Tests Multiple Comparisons Q9a\_4

Tukey HSD

		Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.189*	.073	.050	.00	.38
	3.5	057	.073	.862	25	.13
	5	.091	.073	.594	10	.28
2	1	189*	.073	.050	38	.00
	3.5	247*	.073	.004	44	06
	5	098	.072	.525	29	.09
3.5	1	.057	.073	.862	13	.25
	2	.247*	.073	.004	.06	.44
	5	.148	.072	.171	04	.33
5	1	091	.073	.594	28	.10
	2	.098	.072	.525	09	.29
	3.5	148	.072	.171	33	.04

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company) > Code 2 (Local private company); Code 3.5 (FDI company) > Code 2 (Local private company).

For off-the-job training, the results (see the tables below) ANOVA:  $\alpha$ =0.004<0.05; and **Tukey HSD** indicate that managers in state-owned companies (code 1) identified more positive attitudes than those evident in local private companies (code 2). Managers in FDI companies identified more positive attitudes (code 3.5) than those evident in local private companies (code 2) and joint-stock companies (code 5).

		Mean (Off-the-job training)				
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock	
Q9b_4	4)increasing sustainable <b>competitive</b> <b>advantages</b>	3.76	3.74	3.92	3.89	

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.122	3	1.707	4.491	.004
Within Groups	192.347	506	.380		
Total	197.469	509			

**Post-Hoc Tests Multiple Comparisons** Q9b\_4

Tukey HSD

		Mean difference			95% Confidence interval	
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.198	.078	.055	.00	.40
	3.5	041	.078	.953	24	.16
	5	.154	.077	.189	04	.35
2	1	198	.078	.055	40	.00
	3.5	239*	.078	.012	44	04
	5	044	.077	.941	24	.15
3.5	1	.041	.078	.953	16	.24
	2	.239*	.078	.012	.04	.44
	5	.195	.077	.055	.00	.39
5	1	154	.077	.189	35	.04
	2	.044	.077	.941	15	.24
	3.5	195	.077	.055	39	.00

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company) > Code 2 (Local private company); Code 3.5 (FDI company) > Code 2 (Local private company); Code 3.5 (FDI company) > Code 5 (Joint-stock company).

#### 5. For the statement the employee training is (5) the most effective way to increase employee skills

The results (see Table 4.30) indicate that managers in companies of different ownership types identified positive attitudes towards employee training provision in terms of the most effective way to increase employee skills regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) ANOVA:  $\alpha=0.000<0.05$ ; and Tukey HSD indicate that attitudes of managers in state-owned companies (code 1) are more positive than those evident in local private companies (code 2) and joint-stock companies (code 5). The attitudes of managers in FDI companies (code 3.5) are more positive than those evident in local private companies (code 2).

		Mean (On-the-job training)				
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock	
Q9a_5	5)the most effective way to increase <b>employee skills</b>	3.97	3.38	3.91	3.67	

#### ANOVA

Q9a\_5

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	26.753	3	8.918	16.999	.000
Within Groups	265.445	506	.525		
Total	292.198	509			

#### Post-Hoc Tests **Multiple Comparisons**

Q9a\_5

Tukey HSD 95% Confidence interval Mean difference (I) O2(J) Q2 Std. error Sig. Lower bound Upper bound (I-J)2 .82 .587 .091 .000 .35 .091 .903 3.5 .062 -.17 .30 5 .294\* .090 .007 .06 .53 2 1 -.587 .091 .000 -.82 -.35 3.5 -.525 .091 .000 -.76 -.29 –.293 .090 5 .007 -.53 -.06 3.5 1 -.30 -.062 .091 .903 .17 2 .525 .091 .29 .000 .76 .231 5 .090 .051 .00 .46 1 5 –.294 .090 .007 -.53 -.06 .293\* 2 .090 .007 .06 .53 3.5 -.231.090 .051 -.46 .00 \* The mean difference is significant at the 0.05 level.

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**Results:** Code 1 (State-owned company) > Code 2 (Local private company); Code 1 (State-owned company) > Code 5 (Joint-stock company); Code 3.5 (FDI company) > Code 2 (Local private company).

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.001<0.05; and **Tukey HSD** indicate that the attitudes of managers in state-owned companies are more positive than those evident in local private companies (code 2). The attitudes of managers in FDI companies (code 3.5) are more positive than those evident in local private companies (code 2).

		Mean (Off-the-job training)				
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock	
Q9b_5	5)the most effective way to increase <b>employee skills</b>	3.90	3.61	3.87	3.74	

#### ANOVA

Q9b\_5

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.585	3	2.195	5.423	.001
Within Groups	204.819	506	.405		
Total	211.404	509			

#### Post-Hoc Tests

#### Multiple Comparisons

Q9b\_5

Tukey HSD

-	-	Mean difference (I–J)	-		95% Confidence interval	
(I) Q2	Q2 (J) Q2		Std. error	Sig.	Lower bound	Upper bound
1	2	.285*	.080	.002	.08	.49
	3.5	.022	.080	.993	18	.23
	5	.154	.079	.215	05	.36
2	1	285*	.080	.002	49	08
	3.5	263*	.080	.006	47	06
	5	131	.079	.348	34	.07
3.5	1	022	.080	.993	23	.18
	2	.263*	.080	.006	.06	.47
	5	.132	.079	.344	07	.34
5	1	154	.079	.215	36	.05
	2	.131	.079	.348	07	.34
	3.5	132	.079	.344	34	.07

\* The mean difference is significant at the 0.05 level.

**Results**: Code 1 (State-owned company) > Code 2 (Local private company); Code 3.5 (FDI company) > Code 2 (Local private company).

# 6. For the statement the employee training is (6) the most appropriate training **approach** for my company

The results (see Table 4.30) indicate that managers in companies of different ownership types identified positive attitudes towards employee training provision in terms of the most appropriate training approach for the company regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) ANOVA:  $\alpha$ =0.001<0.05; and **Tukey HSD:** indicate that the attitudes of managers in state-owned companies (code 1) are more positive than those evident in joint-stock companies (code 5). The attitudes of managers in FDI companies (code 3.5) are more positive than those evident in local private companies (code 2). The attitudes of managers in FDI companies (code 3.5) are more positive than those evident in joint-stock companies (code 3.5) are more positive than those evident in joint-stock companies (code 3.5) are more positive than those evident in joint-stock companies (code 5).

		Mean (On-the-job training)				
Code	Statement		(2) Private	(3.5) FDI	(5) Joint- stock	
Q9a_ 6	6)the most appropriate training <b>approach for my</b> <b>company</b>	3.78	3.56	3.83	3.54	

### ANOVA

Q9a\_6

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.791	3	2.930	5.999	.001
Within Groups	247.177	506	.488		
Total	255.969	509			

### Post-Hoc Tests Multiple Comparisons

Q9a\_6 Tukey HSD

	-	Mean difference			95% Confidence interva	
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.220	.088	.061	.00	.45
	3.5	059	.088	.910	29	.17
	5	.238*	.087	.033	.01	.46
2	1	220	.088	.061	45	.01
	3.5	279*	.088	.009	51	05
	5	.018	.087	.997	21	.24
3.5	1	.059	.088	.910	17	.29
	2	.279*	.088	.009	.05	.51
	5	.297*	.087	.004	.07	.52
5	1	238*	.087	.033	46	01
	2	018	.087	.997	24	.21
	3.5	297*	.087	.004	52	07

#### **Multiple Comparisons**

Q9a_6
Tukey HSD

	_	Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company) > Code 5 (Joint Stock company);

Code 3.5 (FDI company) > Code 2 (Local private company);

Code 3.5 (FDI company) > Code 5 (Joint-stock company).

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that managers in state-owned companies (code 1) identified more positive attitudes than local private companies (code 2). Managers in state-owned companies (code 1) identified more positive attitudes than those evident in joint-stock companies (code 5). The managers in FDI companies (code 2) and joint-stock companies (code 5). The managers in local private companies (code 2) and joint-stock companies (code 5). The managers in joint-stock companies (code 5) identified more positive attitudes than the wanagers in local private companies (code 2) and joint-stock companies (code 5). The managers in joint-stock companies (code 2) identified more positive attitudes than those evident in local private companies (code 2).

		Mean (Off-the-job training)				
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock	
Q9b_6	6)the most appropriate training approach for my company	3.79	3.10	3.86	3.43	

## ANOVA

Q9b\_6

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	47.267	3	15.756	31.726	.000
Within Groups	251.284	506	.497		
Total	298.551	509			

# Post-Hoc Tests

# Multiple Comparisons

Q9b\_6 Tukey HSD

		Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.697*	.089	.000	.47	.93
	3.5	066	.089	.878	30	.16
	5	.360*	.088	.000	.13	.59
2	1	697*	.089	.000	93	47
	3.5	763*	.089	.000	99	53
	5	337*	.088	.001	56	11
3.5	1	.066	.089	.878	16	.30

#### **Multiple Comparisons**

Q9b\_6 Tukey HSD

		Mean difference		-	95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
	2	.763*	.089	.000	.53	.99
	5	.426*	.088	.000	.20	.65
5	1	360*	.088	.000	59	13
	2	.337*	.088	.001	.11	.56
	3.5	426*	.088	.000	65	20

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company) > Code 2 (Local private company);

Code 1 (State-owned company) > Code 5 (Joint-stock company);

Code 3.5 (FDI company) > Code 2 (Local private company);

Code 3.5 (FDI company) > Code 5 (Joint-stock company);

Code 5 (Joint-stock company) > Code 2 (Local private company).

# 7. For the statement the employee training is (7)achieving greater return on training investment

The results (see Table 4.30) indicate that managers in companies of different ownership types identified positive attitudes towards employee training provision for achieving greater return on training investment of company regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.001<0.05; and **Tukey HSD** indicate that attitudes of managers in FDI companies (code 3.5) are more positive than those evident in state-owned companies (code 1) and local private companies (code 2).

		Mean	n (On-the-j	job traini	ng)
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9a_7	7)achieving greater <b>return on training</b> <b>investment</b>	3.67	3.59	3.87	3.74

## ANOVA

Q9a\_7

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.586	3	1.862	5.840	.001
Within Groups	161.318	506	.319		
Total	166.904	509			

### Post-Hoc Tests

### **Multiple Comparisons**

Q9a\_7

Tukey HSD

-	-	Mean difference	_		95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.085	.071	.635	10	.27
	3.5	202*	.071	.024	39	02
	5	070	.070	.750	25	.11
2	1	085	.071	.635	27	.10
	3.5	287*	.071	.000	47	10
	5	155	.070	.123	34	.03
3.5	1	.202*	.071	.024	.02	.39
	2	.287*	.071	.000	.10	.47
	5	.132	.070	.240	05	.31
5	1	.070	.070	.750	11	.25
	2	.155	.070	.123	03	.34
	3.5	132	.070	.240	31	.05

\* The mean difference is significant at the 0.05 level.

**Results:** Code 3.5 (FDI company) > Code 1 (State-owned company);

Code 3.5 (FDI company) > Code 2 (State-owned company).

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that the attitudes of managers in FDI companies (code 3.5) are more positive than those evident in managers in companies of other ownership types of companies including state-owned companies (code 1), local private companies (code 2), and joint-stock companies (code 5).

		Mean (Off-the-job training)			
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9b_7	7)achieving greater <b>return on</b> <b>training investment</b>	3.68	3.62	3.87	3.56

## ANOVA

Q9b\_7

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.750	3	2.250	6.250	.000
Within Groups	182.154	506	.360		
Total	188.904	509			

#### **Post-Hoc Tests**

#### **Multiple Comparisons**

Q9b\_7 Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.061	.076	.852	13	.26
	3.5	186	.076	.067	38	.01
	5	.119	.075	.383	07	.31
2	1	061	.076	.852	26	.13
	3.5	247*	.075	.006	44	05
	5	.058	.075	.863	13	.25
3.5	1	.186	.076	.067	.00	.38
	2	.247*	.075	.006	.05	.44
	5	.306*	.075	.000	.11	.50
5	1	119	.075	.383	31	.07
	2	058	.075	.863	25	.13
	3.5	306*	.075	.000	50	11

\* The mean difference is significant at the 0.05 level.

**Results**: Code 3.5 (FDI company) > Code 2 (Local private company); Code 3.5 (FDI company) > Code 1 (State-owned company); Code 3.5 (FDI company) > Code 5 (Joint-stock company).

# 8. For the statement the employee training is (8) to build the company specific human resources

The results (see Table 4.30) indicate that managers in companies of different ownership types identified positive attitudes towards employee training provision for building the company specific human resources regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.001<0.05; and **Tukey HSD** indicate that managers in FDI companies (code 3.5) identified more positive attitudes than those evident in state-owned companies (code 1) as well as local private companies (code 2) and joint-stock companies (code 5).

		Mean (On-the-job training)				
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock	
Q9a_8	8)to build the company <b>specific</b> <b>human resources</b>	3.70	3.73	3.94	3.72	

### ANOVA

Q9a\_8

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.099	3	1.700	5.714	.001
Within Groups	150.516	506	.297		
Total	155.616	509			

#### Post-Hoc Tests Multiple Comparisons

Q9a\_8

Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	034	.069	.960	21	.14
	3.5	249*	.069	.002	43	07
	5	024	.068	.985	20	.15
2	1	.034	.069	.960	14	.21
	3.5	215*	.069	.010	39	04
	5	.010	.068	.999	16	.19
3.5	1	.249*	.069	.002	.07	.43
	2	.215*	.069	.010	.04	.39
	5	.225*	.068	.005	.05	.40
5	1	.024	.068	.985	15	.20
	2	010	.068	.999	19	.16
	3.5	225*	.068	.005	40	05

\* The mean difference is significant at the 0.05 level.

#### **Results:** Code 3.5 (FDI company) > Code 1 (State-owned company); Code 3.5 (FDI company) > Code 2 (Local private company); Code 3.5 (FDI company) > Code 5 (Joint-stock company).

However, for off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that the managers in local private companies (code 2) identified more positive attitudes than those evident in state-owned companies (code 1) as well as FDI companies (code 3.5). The attitudes of managers in joint-stock companies (code 5) are more positive than those evident in state-owned companies (code 1) and FDI companies (code 3.5).

		Mea	n (Off-the	-job trainiı	ng)
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9b_8	8)to build the company <b>specific human resources</b>	3.30	3.64	3.29	3.54

# ANOVA

Q9b\_8

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.661	3	3.887	10.021	.000
Within Groups	195.879	505	.388		
Total	207.540	508			

### Post-Hoc Tests Multiple Comparisons O9b 8

Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	344*	.079	.000	55	14
	3.5	.005	.078	1.000	20	.21
	5	$242^{*}$	.078	.011	44	04
2	1	.344*	.079	.000	.14	.55
	3.5	.349*	.078	.000	.15	.55
	5	.102	.078	.555	10	.30
3.5	1	005	.078	1.000	21	.20
	2	349*	.078	.000	55	15
	5	247*	.077	.008	45	05
5	1	.242*	.078	.011	.04	.44
	2	102	.078	.555	30	.10
	3.5	.247*	.077	.008	.05	.45

\* The mean difference is significant at the 0.05 level.

**Results:** Code 2 (Local private company) > Code 1 (State-owned company);

Code 5 (Joint-stock company) > Code 1 (State-owned company);

Code 2 (Local private company) > Code 3.5 (FDI company);

Code 5 (Joint-stock company) > Code 3.5 (FDI company).

**9.** For the statement the employee training is (9) increasing **positive attitudes** of employees such as job satisfaction of employee, commitment

The results (see Table 4.30) indicate that managers in companies of different ownership types identified positive attitudes towards employee training provision for increasing positive attitudes of employees such as job satisfaction of employee, commitment of company regardless of whether the training was on-the-job or off-the-job training. For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.003<0.05; and **Tukey HSD** indicate that managers in FDI companies (code 3.5) had more positive attitudes than those evident in local private companies (code 2).

		Mea	n (On-the-j	job trai	ning)
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9a_9	9)increasing <b>positive attitudes</b> of employees such as job satisfaction of employee, commitment	4.01	3.84	4.07	3.92

#### ANOVA

Q9a\_9

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.872	3	1.291	4.724	.003
Within Groups	138.263	506	.273		
Total	142.135	509			

# Post-Hoc Tests Multiple Comparisons

Q9a\_9 Tukey HSD

-	-	Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.167	.066	.057	.00	.34
	3.5	063	.066	.775	23	.11
	5	.091	.065	.500	08	.26
2	1	167	.066	.057	34	.00
	3.5	230*	.066	.003	40	06
	5	075	.065	.654	24	.09
3.5	1	.063	.066	.775	11	.23
	2	.230*	.066	.003	.06	.40
	5	.154	.065	.084	01	.32
5	1	091	.065	.500	26	.08
	2	.075	.065	.654	09	.24
	3.5	154	.065	.084	32	.01

\* The mean difference is significant at the 0.05 level.

**Results:** Code 3.5 (FDI company) > Code 2 (Local private company).

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that managers in state-owned companies (code 1) had more positive attitudes than those evident in local private companies (code 2) and joint-stock companies (code 5). In addition, managers in FDI companies (code 3.5) had more positive attitudes than those evident in local private companies (code 2) and joint-stock companies (code 5).

		Mean	(Off-the-j	ob train	ing)
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9b_9	9)increasing <b>positive attitudes</b> of employees such as job satisfaction of employee, commitment	3.93	3.62	4.05	3.70

# ANOVA

Q9b\_9

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.858	3	4.953	12.091	.000
Within Groups	207.260	506	.410		
Total	222.118	509			

## **Post-Hoc Tests Multiple Comparisons** O9b 9

Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.309*	.081	.001	.10	.52
	3.5	119	.081	.451	33	.09
	5	.223*	.080	.027	.02	.43
2	1	309*	.081	.001	52	10
	3.5	$428^{*}$	.080	.000	64	22
	5	085	.080	.706	29	.12
3.5	1	.119	.081	.451	09	.33
	2	.428*	.080	.000	.22	.64
	5	.343*	.080	.000	.14	.55
5	1	223*	.080	.027	43	02
	2	.085	.080	.706	12	.29
	3.5	343*	.080	.000	55	14

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company) > Code 2 (Local private company); Code 1 (State-owned company) > Code 5 (Joint-stock company); Code 3.5 (FDI company) > Code 2 (Local private company);

Code 3.5 (FDI company) > Code 5 (Joint-stock company).

**10.** For the statement the employee training is (10) waste of **money** 

The results (see Table 4.30) indicate that managers in companies of different ownership types identified negative attitudes towards the statement that employee training provision is a waste of money regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that managers in FDI companies (code 3.5) had more negative attitudes towards this statement compared to managers in state-owned companies (code 1) local private companies (code 2), as well as joint-stock companies (code 5). The attitudes of managers in state-owned companies (code 1) and joint-stock companies (code 5) are more negative compared to those evident in local private companies (code 2).

		Mean	(On-the-jo	b traini	ng)
Code	Statement	(1)	(2)	(3.5)	(5)
		State-owned	Private	FDI	Joint-stock
Q9a_10	10)waste of <b>money</b>	1.70	2.21	1.26	1.67

## ANOVA

Q9a\_10

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	56.968	3	18.989	42.422	.000
Within Groups	226.501	506	.448		
Total	283.469	509			

# Post-Hoc Tests Multiple Comparisons

Q9a\_10 Tukey HSD

	-	Mean difference		-	95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	510*	.084	.000	73	29
	3.5	.436*	.084	.000	.22	.65
	5	.022	.083	.994	19	.24
2	1	.510*	.084	.000	.29	.73
	3.5	.947*	.084	.000	.73	1.16
	5	.532*	.083	.000	.32	.75
3.5	1	436*	.084	.000	65	22
	2	947*	.084	.000	-1.16	73
	5	$414^{*}$	.083	.000	63	20
5	1	022	.083	.994	24	.19
	2	532*	.083	.000	75	32
	3.5	.414*	.083	.000	.20	.63

\* The mean difference is significant at the 0.05 level.

**Results:** Code 2 (Local private company) > Code 1 (State-owned company);

- Code 1 (State-owned company) > Code 3.5 (FDI company);
- Code 2 (Local private company) > Code 3.5 (FDI company);
- Code 2 (Local private company) > Code 5 (Joint-stock company);
- Code 5 (Joint-stock company) > Code 3.5 (FDI company).

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that managers in FDI companies (code 3.5) had more negative attitudes towards this statement compared to those evident in state-owned companies (code 1), local private companies (code 2), and joint-stock companies (code 5). The managers in state-owned companies (code 1) and joint-stock companies (code 5) had more negative attitudes compared to those evident in local private companies (code 2).

		Mea	n (Off-the-	-job train	ing)
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9b_10	10)waste of <b>money</b>	1.72	2.33	1.32	1.96

### ANOVA

Q9b\_10

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	68.390	3	22.797	32.423	.000
Within Groups	355.774	506	.703		
Total	424.165	509			

#### Post-Hoc Tests Multiple Comparisons

Multiple Compariso

Q9b\_10 Tukey HSD

	-	Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	613*	.106	.000	89	34
	3.5	.397*	.106	.001	.12	.67
	5	242	.105	.096	51	.03
2	1	.613*	.106	.000	.34	.89
	3.5	$1.010^{*}$	.105	.000	.74	1.28
	5	.371*	.104	.002	.10	.64
3.5	1	397*	.106	.001	67	12
	2	$-1.010^{*}$	.105	.000	-1.28	74
	5	639*	.104	.000	91	37
5	1	.242	.105	.096	03	.51
	2	371*	.104	.002	64	10
	3.5	.639*	.104	.000	.37	.91

\*. The mean difference is significant at the 0.05 level.

**Results:** Code 2 (Local private company) > Code 1 (State-owned company);

Code 2 (Local private company) > Code 3.5 (FDI company); Code 2 (Local private company) > Code 3.5 (FDI company); Code 2 (Local private company) > Code 5 (Joint-stock company);

Code 5 (Joint-stock company) > Code 3.5 (FDI company).

**11.** For the statement the employee training is (11) encouraging **staff turnover** 

The results (see Table 4.30) indicate that managers in companies of different ownership types identified negative attitudes towards the statement that employee training provision is encouraging staff turnover regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that managers in FDI companies (code 3.5) had more negative attitudes than those evident in state-owned companies (code 1), local private companies (code 2), and joint-stock companies (code 5). Managers in state-owned companies (code 1) and joint-stock companies (code 5) are more negative than those evident in local private companies (code 2).

		Mea	n (On-the	-job trai	ning)
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9a_11	11)encouraging staff turnover	1.70	2.13	1.24	1.58

## ANOVA

Q9a\_11

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	51.379	3	17.126	39.830	.000
Within Groups	217.572	506	.430		
Total	268.951	509			

# Post-Hoc Tests Multiple Comparisons

Q9a\_11 Tukey HSD

	_	Mean difference		-	95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	431*	.083	.000	64	22
	3.5	.460*	.083	.000	.25	.67
	5	.120	.082	.457	09	.33
2	1	.431*	.083	.000	.22	.64
	3.5	.891*	.082	.000	.68	1.10
	5	.551*	.082	.000	.34	.76
3.5	1	460*	.083	.000	67	25
	2	891*	.082	.000	-1.10	68
	5	340*	.082	.000	55	13
5	1	120	.082	.457	33	.09
	2	551*	.082	.000	76	34
	3.5	.340*	.082	.000	.13	.55

\* The mean difference is significant at the 0.05 level.

**Results:** Code 2 (Local private company) > Code 1 (State-owned company);

Code 1 (State-owned company) > Code 3.5 (FDI company);

Code 2 (Local private company) > Code 3.5 (FDI company);

Code 2 (Local private company) > Code 5 (FDI company);

Code 5 (FDI company) > Code 3.5 (FDI company).

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that managers in FDI companies (code 3.5) are more negative than those evident in state-owned companies (code 1), local private companies (code 2), and joint-stock companies (code 5). Managers in joint-stock companies (code 5) had more negative attitudes than those evident in local private companies (code 2).

		Mean (Off-the-job training)				
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint - stock	
Q9b_1 1	11)encouraging staff turnover	1.72	1.99	1.24	1.63	

## ANOVA

Q9b\_11

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36.327	3	12.109	27.796	.000
Within Groups	220.436	506	.436		
Total	256.763	509			

## Post-Hoc Tests Multiple Comparisons O9b\_11

Tukey HSD

		Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	272*	.083	.006	49	06
	3.5	.476*	.083	.000	.26	.69
	5	.091	.082	.685	12	.30
2	1	.272*	.083	.006	.06	.49
	3.5	.748*	.083	.000	.53	.96
	5	.363*	.082	.000	.15	.58
3.5	1	476*	.083	.000	69	26
	2	748*	.083	.000	96	53
	5	385*	.082	.000	60	17
5	1	091	.082	.685	30	.12
	2	363*	.082	.000	58	15
	3.5	.385*	.082	.000	.17	.60

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company) > Code 3.5 (FDI company);

Code 2 (Local private company) > Code 3.5 (FDI company); Code 2 (Local private company) > Code 5 (Joint-stock company);

Code 5 (Joint-stock company)> Code 3.5 (FDI company).

**12.** For the statement the employee training is (12) the needs for **innovation** 

The results (see Table 4.30) indicate that managers in companies of different ownership types identified positive attitudes towards employee training provision for the innovation of the company regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that managers in state-owned companies (code 1) had more positive attitudes than those evident in local private companies (code 2). These attitudes were less positive than FDI companies (code 3.5). Managers in FDI companies had more positive attitudes than those evident in local private companies (code 2) and joint-stock companies (code 5). Managers in joint-stock companies (code 5) are more positive than those evident in local private companies (code 5) are more positive than those evident in local private companies (code 5) are more positive than those evident in local private companies (code 5) are more positive than those evident in local private companies (code 5).

		Mear	n (On-the-	job trai	ining)
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9a_12	12) the needs for <b>innovation</b>	4.12	3.77	4.66	4.04

#### ANOVA

Q9a\_12

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	53.194	3	17.731	37.892	.000
Within Groups	236.777	506	.468		
Total	289.971	509			

# Post-Hoc Tests Multiple Comparisons

Q9a\_12 Tukey HSD

		Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. Error	Sig.	Lower bound	Upper bound
1	2	.350*	.086	.000	.13	.57
	3.5	541*	.086	.000	76	32
	5	.082	.085	.771	14	.30
2	1	350*	.086	.000	57	13
	3.5	$892^{*}$	.086	.000	-1.11	67
	5	268*	.085	.009	49	05
3.5	1	.541*	.086	.000	.32	.76
	2	.892*	.086	.000	.67	1.11
	5	.624*	.085	.000	.40	.84
5	1	082	.085	.771	30	.14
	2	$.268^{*}$	.085	.009	.05	.49
	3.5	624*	.085	.000	84	40

#### **Multiple Comparisons**

Q9a\_12 Tukey HSD

	Mean difference		-	95% Confide	ence interval
(I) Q2 (J) Q2	(I–J)	Std. Error	Sig.	Lower bound	Upper bound

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company) > Code 2 (Local private company);

Code 3.5 (FDI company) > Code 1 (State-owned company);

Code 3.5 (FDI company) > Code 2 (Local private company);

Code 5 (Joint-stock company) > Code 2 (Local private company);

Code 3.5 (FDI company) > Code 5 (Joint-stock company).

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD:** indicate that managers in state-owned companies (code 1) had more positive attitudes than those evident in local private companies (code 2). Managers in FDI companies (code 3.5) had more positive attitudes than those evident in state-owned companies (code 1), as well as local private companies (code 2) and joint-stock companies (code 5).

		Mea	n (Off-the	-job train	ing)
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9b_12	12) the needs for <b>innovation</b>	4.22	3.91	4.68	4.13

### ANOVA

Q9b\_12

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39.451	3	13.150	31.420	.000
Within Groups	211.782	506	.419		
Total	251.233	509			

# Post-Hoc Tests Multiple Comparisons

Q9b\_12 Tukey HSD

-	-	Mean difference			95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.303*	.082	.001	.09	.51
	3.5	461*	.082	.000	67	25
	5	.087	.081	.702	12	.30
2	1	303*	.082	.001	51	09
	3.5	764*	.081	.000	97	55
	5	216*	.081	.038	42	.00
3.5	1	.461*	.082	.000	.25	.67
	2	.764 <sup>*</sup>	.081	.000	.55	.97
	5	.548*	.080	.000	.34	.76

#### **Multiple Comparisons**

Q9b\_12 Tukey HSD

-	-	Mean difference		-	95% Confide	ence interval
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
5	1	087	.081	.702	30	.12
	2	.216*	.081	.038	.01	.42
	3.5	548*	.080	.000	76	34

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company) > Code 2 (Local private company); Code 3.5 (FDI company) > Code 1 (State-owned company);

Code 3.5 (FDI company) > Code 2 (Local private company);

Code 3.5 (FDI company) > Code 5 (Joint-stock company).

#### **13.** For the statement the employee training is (13) to meet **business changes**

The results (see Table 4.30) indicate that managers in companies of different ownership types had positive attitudes towards employee training provision for business changes regardless of whether the training was on-the-job or off-the-job training.

For on-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that managers in state-owned companies (code 1) had more positive attitudes than that evident in local private companies (code 2) but less positive than that evident for FDI companies (code 3.5). The attitudes of managers in FDI managerial attitudes (code 3.5) are more positive than that evident in local private companies (code 2) and joint-stock companies (code 5). The attitudes of managers in joint-stock companies (code 5) are more positive than that evident in local private companies (code 2).

		Mea	an (On-the	-job train	ing)
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9a_13	13) to meet <b>business changes</b>	4.14	3.67	4.65	4.01

#### ANOVA

Q9a\_13

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	62.719	3	20.906	37.585	.000
Within Groups	281.456	506	.556		
Total	344.175	509			

#### Post-Hoc Tests Multiple Comparisons

Multiple Compariso

Q9a\_13 Tukey HSD

-	_	Mean difference			95% Confidence interval	
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.477*	.094	.000	.23	.72
	3.5	$502^{*}$	.094	.000	74	26
	5	.136	.093	.459	10	.38
2	1	477*	.094	.000	72	23
	3.5	$979^{*}$	.094	.000	-1.22	74
	5	341*	.093	.002	58	10
3.5	1	$.502^{*}$	.094	.000	.26	.74
	2	.979*	.094	.000	.74	1.22
	5	.638*	.093	.000	.40	.88
5	1	136	.093	.459	38	.10
	2	.341*	.093	.002	.10	.58
	3.5	638*	.093	.000	88	40

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company) > Code 2 (Local private company);

Code 3.5 (FDI company) > Code 1 (State-owned company);

Code 3.5 (FDI company) > Code 2 (Local private company);

Code 5 (Joint-stock company) > Code 2 (Local private company);

Code 3.5 (FDI company) > Code 5 (Joint-stock company).

For off-the-job training, the results (see the tables below) **ANOVA:**  $\alpha$ =0.000<0.05; and **Tukey HSD** indicate that the attitudes of managers in state-owned companies (code 1) are more positive than that evident in local private companies (code 2). The attitudes of managers in FDI companies (code 3.5) are more positive than that evident in state-owned companies (code 1), as well as local private companies (code 2), and joint-stock companies (code 5).

		Mean (Off-the-job training)			
Code	Statement	(1) State- owned	(2) Private	(3.5) FDI	(5) Joint- stock
Q9b_13	13) to meet <b>business changes</b>	4.19	3.91	4.68	4.11

### ANOVA

Q9b\_13

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	40.027	3	13.342	30.344	.000
Within Groups	222.491	506	.440		
Total	262.518	509			

#### Post-Hoc Tests Multiple Comparisons

Q9b\_13

Tukey HSD

-	-	Mean difference			95% Confidence interval	
(I) Q2	(J) Q2	(I–J)	Std. error	Sig.	Lower bound	Upper bound
1	2	.279*	.084	.005	.06	.50
	3.5	485*	.084	.000	70	27
	5	.078	.083	.779	13	.29
2	1	279*	.084	.005	50	06
	3.5	764*	.083	.000	98	55
	5	201	.083	.072	41	.01
3.5	1	.485*	.084	.000	.27	.70
	2	.764*	.083	.000	.55	.98
	5	.564*	.082	.000	.35	.78
5	1	078	.083	.779	29	.13
	2	.201	.083	.072	01	.41
	3.5	564*	.082	.000	78	35

\* The mean difference is significant at the 0.05 level.

**Results:** Code 1 (State-owned company) > Code 2 (Local private company); Code 3.5 (FDI company) > Code 1 (State-owned company); Code 3.5 (FDI company) > Code 2 (Local private company); Code 3.5 (FDI company) > Code 5 (Joint-stock company).

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