

**THE IMPACT OF MANAGERS' LEARNING STYLES AND  
LEADERSHIP STYLES AND THE EFFECTIVENESS OF  
THEIR ORGANISATIONS: A CASE STUDY FROM SMALL  
RETAIL TYRE COMPANIES IN THAILAND**

**By**

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## **Abstract**

Today's business requires managers who can make an impact by competing successfully in the context of globalisation. Organisational learning contributes to a firm's ability to compete. However, particularly in small and medium enterprises, research into managers' approaches to transferring and encouraging learning in the organisation remains inadequate. This study examines the relationship between managers' learning and leadership styles and sustaining learning in the organisation, and consequently increasing organisational effectiveness. Small retail tyre firms in north east Thailand are taken as a case study.

Mixed research methods were applied. Pilot studies were tested to ensure reliability and validity. In a quantitative approach, questionnaires were used to collect data, and different statistical methods were used to analyse the data. Questionnaires were distributed to the managers of small tyre firms covering demographics, learning styles, leadership styles and organisational effectiveness. A qualitative approach of semi-structured interviews was used to gather further, more detailed, data.

The results suggest that the Reflector and Pragmatist learning styles and the Transformational and Transactional leadership styles are the most effective. Results from the interviews suggest more specific ways of encouraging learning in the organisation, in terms of organisational management, leadership roles and learning and experience.

## **Dedication**

I would like to dedicate this thesis to my parents, Mr. Sompoch Zumitzavan and Mrs. Daungyiva Zumitzavan. They put aside their own desires to see me fulfil my dreams to succeed in life. They have always trusted in me and supported me in everything. I would not have started and completed my PhD without them. They mean the world to me and I am eternally thankful to them.

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# **CHAPTER 1 INTRODUCTION**

## **1. Introduction**

This chapter presents the rationale of the research, the background, research questions, research objectives, theoretical framework, methodology, and the structure of the thesis.

## **2. Rationale of Research**

The resource-based views (RBV) were scrutinised as a collection of resources attached to the management of firms (Wernerfelt, 1984). The RBV of the firm has become extensively accepted because of its large influence since the beginning of the 1990s (Connor, 2002; Medcof, 2000).

The RBV has been applied to explain how a firm's resources make a difference to the organisational effectiveness of the firm (Priem and Butler, 2001). RBV is chiefly associated with two major sectors: human capital and operational process. The former involves use made of employees' skills in the organisation. The latter involves the way an organisation distributes tasks to members in order to make it more effective than its competitors. RBV relates to the ability of a firm to manage its resources, both tangible and intangible. Tangible resources include those factors containing financial or physical value as measured by the firm's

balance sheet. Intangible resources include those factors that are non-financial in nature. Hall (1992, 1993) proposed that intangible resources mainly fall into two groups, assets and skills. If the intangible resource is something that the firm has, it is an asset. If the intangible resource is something that the firm does, it is a skill or capability.

Based on the RBV, internal capabilities enhance competitive advantage and performance. For example, a system of knowledge and a system of learning increase competitive advantage through innovation and strategic linkage of products (Helfat and Raubitschek, 2000). Specifically, learning capability is marked by observable allocation of resources to the task of acquiring other capabilities (Winter, 2000).

In order to create the competitive advantage, it is important to consider not only the HR practices, which is part of RBV, but also its collaboration with the organisation's strategies, which is part of Strategic Human Resource Management (SHRM). Putting these rational approaches into practice by adapting RBV and SHRM concepts may lead the organisation to perform more effectively and efficiently in accomplishing its goals, by identifying its competent human resource capital in operation. This should improve competency and connectivity as RBV and SHRM are considered as compatible and sustainable concepts that may improve the organisation's strategy through adapting appropriate HRM practices. Therefore, this may lead the firm to

optimise the unique resource of its employees' efforts, to increase the level of productivity.

Richard and Johnson (2001a) proposed that effective SHRM significantly reduces turnover, which in turn enhances competitive advantage and increases overall performance. SHRM can be understood in terms of building human resource complexities through innovations such as team-based job design, flexible workforces, and employees' empowerment.

RBV has been found to be valuable in terms of sustainability by decreasing costs or increasing revenues, and it can identify human resources with rare characteristics that are not easy to imitate. Wright et al. (2001) proposed that people are strategically important to a firm's success. Cappelli and Singh (1992) proposed that a certain business strategy requires a unique set of behaviours and attitudes from employees, and that certain human resource policies produce a unique set of responses from employees. This may be linked to show that HR has been used as a tool to develop business strategy to enhance the competitive advantage of the firm while increasing the capability of the employees. More importantly, Wright et al. (1994) proposed that a highly skilled and highly motivated workforce is significant as a source of competitive advantage; the human capital pool must have both high levels of skill and a willingness to reveal productive behaviour.

Dyer (1984) also recommended that human resources may be related to the performance of the organisation in different forms: personal outcomes, organisational strategy outcomes, and bottom-line results. Personal outcomes refer to the articulated goals of an organisational human resource strategy such as labour costs, wages, salaries, benefit levels, and employee morale. Organisational strategy outcomes include output levels, new product development, product quality, prices, costs, timeliness in entering or leaving market, timeliness of deliveries, quality of service, speed in opening new facilities, and even market share and cash flow. Last, bottom-line results are involved in some measure of profitability such as return on investment, equity, assets, or sales. Hence, this may suggest that there is a potential link between HR and performance that may be related to the level of success of an organisation.

However, several studies have questioned whether HR may not be directly related to organisational effectiveness. As discussed by Huselid (1995), the impact of HRM on financial performance is in part due to its influence on employee turnover and productivity. It is possible that the lower the rate of employee turnover, the lower is the cost of employee recruitment and selection. So, the rate of employee turnover and productivity may affect the level of financial performance. The identification of some of the processes through which these practices affect a firm's profits helps to establish the plausibility of a link with financial performance (Guest and Conway, 1997; Guest et al., 2003). However, some of the influence on a firm's profits remains unaccounted for, and the source of these remaining gains is an important topic for future research.

Correspondingly, MacDuffie (1995) suggested that HR practices may help to increase organisational performance if it is integrated into the business strategy. So, it seems that HR practices may not be directly associated with organisational performance. In addition, Guest et al. (2003) have said that if we are interested in demonstrating an association between greater use of HR practices and organisational effectiveness, then the results are generally positive; if we are more interested in showing that HR practices are associated with a change in performance, then they are negative.

However, this study is focused on the relationship between performance and HR practices rather than on HR strategy. This implies that there may not be a direct link between HR practices and performance because there may be other variables which are related to performance, such as HR strategy, business strategy, and strategy context. So, it is possible that the overall strategies which are determined by the management level may affect performance overall.

In addition, Mabey and Ramirez (2005) studied whether the management development and HRM contribute significantly to superior performance by a firm. They found that organisations successfully integrating their business and HR strategies also report better management development (MD) systems, a more favourable MD ethos and higher perceived importance attributed to MD by line managers. However, the results of this study also showed that there is no significant correlation between HR strategy and organisational productivity. Even though the empirical evidence of this study showed that managers

perceived that it is important to incorporate HR strategy into overall business strategies, it does not promise that HR can help increase the level of organisational effectiveness. Likewise, Mabey and Gooderham (2005) found that some of the impact on organisational performance is derived from attempts to integrate HR with an organisation's business strategy and the degree to which HR specialists play an active role in formulating that strategy. Therefore, this implies that HR may not be directly related to organisational effectiveness, or HR may not help increase the level of organisational effectiveness unless it is integrated into the business strategy.

In addition, Fleetwood and Hesketh (2006) pointed out that there may be a link between HR and performance; however, it may be too soon to conclude that there is such a link because there is very little research into exploring reverse causality between HR and organisational effectiveness. So, it may not be easy to prove whether HR cause improved organisational effectiveness. Fleetwood and Hesketh (2008) suggested that the challenge for the future HRM and performance-link writer is to extend and utilise the alternative meta-theoretical options accessible in order to better understand how HR enables people to perform. Likewise, Wright et al. (2005) studied the causality between HR and performance, suggesting that research requires studying organisations that are subject to a vast variety of variables that influence performance. Also, the research almost universally relies on survey or interview methodologies to assess the HR practices that exist at a given time. It is important to note that research built predominantly around survey methodologies can never match the ability to

demonstrate both temporal precedence and the control of alternative explanations that exist in laboratory experiments. Wright and colleagues then suggested that no survey design can ultimately prove cause in either direction. This further implies that any causality between HR and organisational effectiveness must be made with extreme caution.

In conclusion, RBV was considered as a concept to sustain an organisation seeking competitive advantage, which may possibly allow it to obtain and employ valuable, scarce and inimitable resources (Barney, 1995). People in the organisation are viewed as an intangible resource. Human resource management may be applied to ensure the participation and dedication of employees as a direction to guide an organisation to increased organisational effectiveness (Guest et al., 2003; Wright et al., 2001).

Kolb and Smith (1996) emphasised that people learn through experience, and the role of experience is important in shaping the process of learning. Relating this to the leadership style of the manager, as suggested by Kouzes and Posner (1995), stated that role experience is strongly related to the way managers learn how to lead. This shows that managers may effectively learn from their own experience and the experience of others. Brown and Posner (2001) found that how people learn is significantly correlated with how they act as managers. They also verified that the managers who frequently engaged in all four learning styles (action, thinking, feeling, and assessing others) also engaged more frequently in a greater variety of leadership styles, such as challenging, inspiring, enabling,

modelling and encouraging. They confirmed that the combination of learning styles and the transformational leadership style are significantly correlated.

Posner (2009) also proposed that people learn from their experience, however formal or informal, structured or naturally occurring. Hence, this showed that although managers may learn through their experience formally or informally, learning styles having a positive correlation with leadership styles may help managers to apply and learn more effectively through their experience. It is argued by Posner (2009) that individuals who can learn from more than one category and thus have a greater repertoire of learning styles are better able to learn about leading and becoming leaders. This happens because they are more capable of approaching and learning from a greater variety of situations than those more narrowly focused or limited in their methodology for learning. This in turn may lead to increase the ability of managers to utilise their leadership successfully. Posner (2009) also recommended that leadership development is a learning process in itself. Hence, this may show the connection between learning styles and leadership styles, in that the learning styles may help managers who aspire to understanding how to learn effectively and may utilise their leadership style to manage their firm productively.

The managers who know how to learn effectively and utilise their leadership effectively would be able to develop the capacity of their employees, which is inimitable through the HRM practices. Ultimately, this may lead to enhancing organisational effectiveness. In this study, the learning and leadership styles of

managers were studied to investigate the relationship through organisational effectiveness.

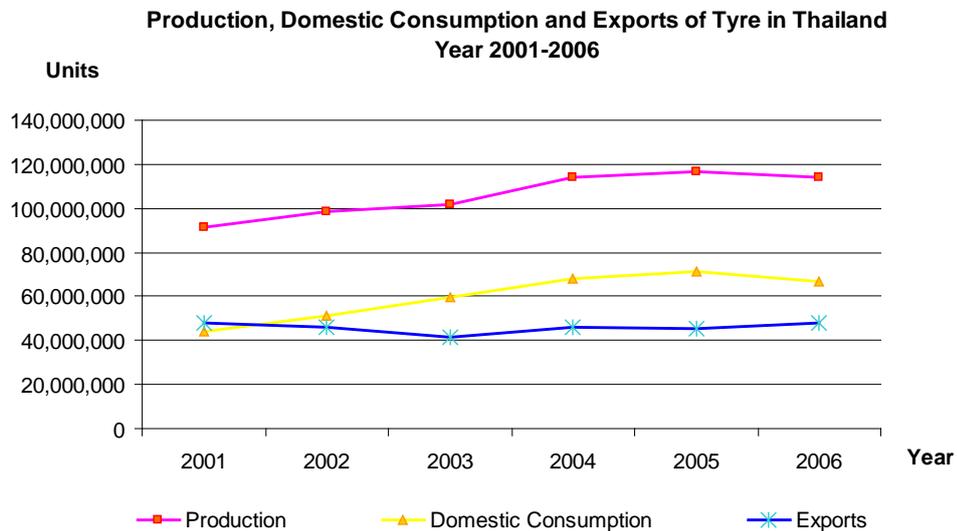
### **3. Background of Research**

The progression of globalisation has forced countries and regions to become more interrelated (Yochanan, 2006). Southeast Asia is one region that has emerged as an important host region of Foreign Direct Investment, while Thailand is increasingly important economically within the region (UNCTAD, 2006). Although Thailand was among the countries hardest hit by the 1997 Asian economic crisis, its economy recovered and subsequently prospered (Lukas and Chodechai, 2007; Pananond, 2007; Zhu, 2005).

In addition, the Thai government realises that one of the most important factors to sustain and drive the economy is Small and Medium Enterprises (SMEs). In 2007, the Gross Domestic Product (GDP) of Thailand was approximately 8.485 million baht (22 January 2009, 49.37 Baht = 1 GBP; Krung Thai Bank PCL, 2008) whilst the GDP of the SMEs was approximately 3.244 million baht; that is, its share of the national GDP was around 38.2 per cent (Thailand. Office of Small and Medium Enterprises Promotion, 2007). More specifically, Thai SMEs play a vital role in sustaining and encouraging employment; value-added foreign direct investment; cost saving in imports; original involvement of increased experience; centres of business; a source of skills; and expertise improvement (Institute for Small and Medium Enterprises Development, 2008).

Hence, the Thai government focuses on supporting, encouraging and transferring knowledge to SMEs (Thailand. Office of Small and Medium Enterprises Promotion, 2005). Furthermore, to transfer knowledge and reinforce the capability of Thai SMEs, the government has focused on sustaining and developing them, for example by establishing the Institute for Small and Medium Enterprises Development.

**Figure 1: Production, Domestic Consumption and Exports of Automotive-Tyre Industry in Thailand**



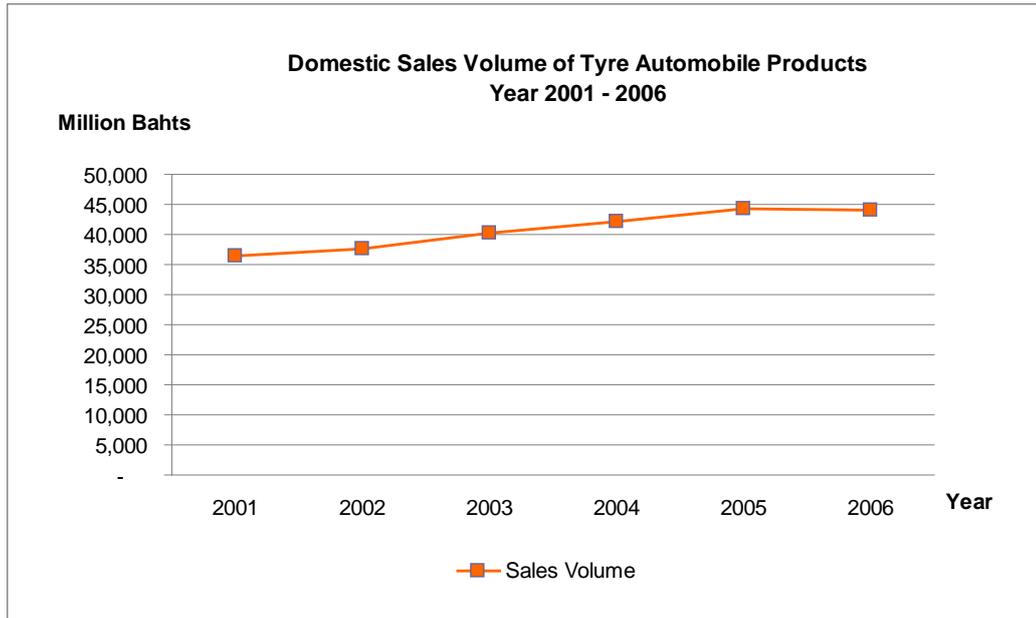
Source: Thailand. Office of Industrial Economics Ministry of Industry, 2007

Moreover, the Thai government has succeeded in its efforts to expand the automotive industry and transform the country into the “Detroit of the East”, with vehicle makers keen to use the country as a platform for export to other members of the Association of South-East Asian Nations (ASEAN) (Thailand. Economist Intelligence Unit, 2008). Recently, the number of vehicles produced in Thailand has increased rapidly (Thailand. Economist Intelligence Unit, 2008).

As a related and supporting industry of the automotive industry, the automotive-tyre industry has also been progressively growing in terms of production, domestic consumption and export (see Figure 1). It appears that there is a large demand for the products of the automotive-tyre industry.

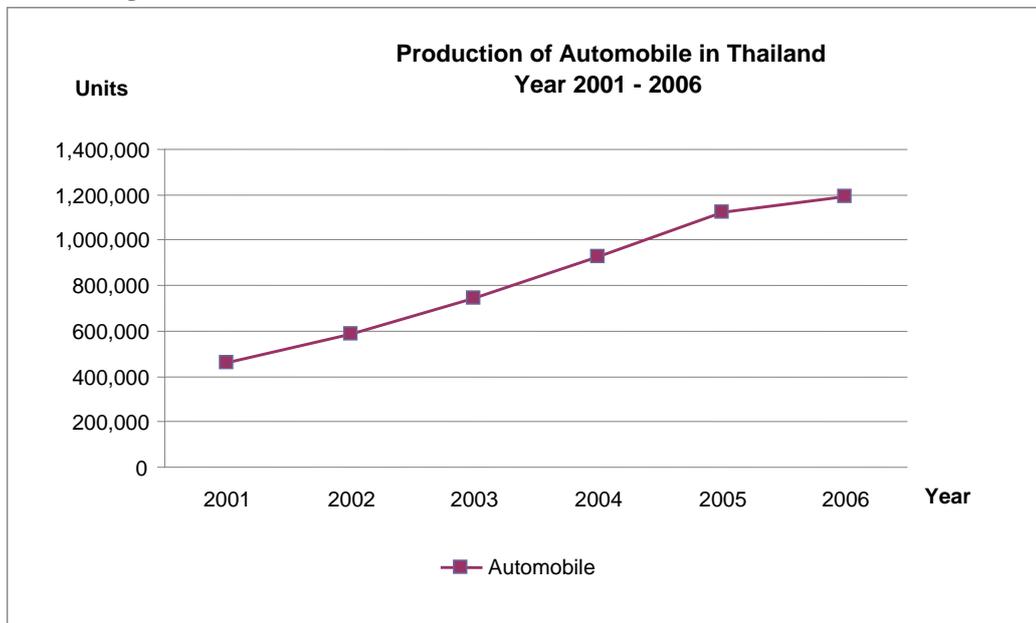
Furthermore, it has been emphasised that there are approximately 1224 small retail tyre firms in Thailand, composed of 281 firms in the North, 297 in the Northeast, 253 in the middle, 189 in the South, 87 in the East, and 117 firms in the West of Thailand (Thailand. Ministry of Commerce, 2005). It appears that the most densely populated region, with about 297 small retail tyre firms, is the Northeast of Thailand; this area is indeed the most densely populated region with approximately 21,386,000 people (Thailand. Ministry of Transportation, 2008). Northeast Thailand borders on Laos and Cambodia, and small retail tyre firms in this region benefit from acquiring customers from foreign countries. In addition, vehicle repair and maintenance is a sub-sector of service industry, the third largest sector comprising 41,450 units of the total SMEs service sub-sector (Thailand. Office of Small and Medium Enterprises Promotion, 2005).

**Figure 2: Domestic sales volume of tyre automotive products**



Source: Adapted from Thailand. Marketing Department Michelin Siam Group Co., Ltd., 2009

**Figure 3 : Production of Automobiles in Thailand 2001 to 2006**



Source: Adapted from Thailand. Statistical Forecasting Bureau National Statistical Office of Thailand, 2010 <http://web.nso.go.th/index.htm>

Additionally, as can be seen from Figure 2, the volume of tyre automotive product sales increased rapidly from 2001 to 2006. This development of the tyre automotive product may suggest that customers in Thailand increasingly continue to purchase this product. Furthermore, Figure 3 emphasised that the increase in automobile production in Thailand from 2001 to 2006 indicates that there is a great deal of domestic demand for the automobile in Thailand. This illustrates the connection between the increasing production of automobile and tyre products and the increase in domestic consumption, along with the growing improvement in automobile production.

In addition, Thai SMEs are defined by their number of employees and the size of their fixed assets (see Table 1). In Thailand, for a medium sized firm manufacturing and service firms employing no more than 200 people, with assets of 200 million baht or less, are classified as SMEs; wholesalers with no more than 50 employees and assets of 100 million baht or less, and retailers with no more than 30 employees and assets of 60 million baht or less are also classified as SMEs. For a small sized firm, manufacturing and service firms employing no more than 50 people, with assets of 50 million baht or less are classified as SMEs; wholesalers with no more than 25 employees and assets of 50 million baht or less, and retailers with no more than 15 employees and assets of 30 million baht or less are also classified as SMEs. (Institute for Small and Medium Enterprises Development, 2008).

On September 11th 2002, the Ministry of Industry in Thailand introduced the definition of Thai small and medium-sized enterprises. This definition is based on the number of paid employees and fixed capital. An enterprise is categorised as an SME if it has fewer than 200 employees and fixed capital of less than 200 million baht, excluding land and properties. SMEs in Thailand are classified in three sections: production, service, and trading (Thailand. Office of Industrial Economics Ministry of Industry, 2007).

Forth et al. (2006, p. 5) emphasised that official statistics in the United Kingdom and European Union categorise all private sector enterprises with fewer than 250 employees as SMEs. Within the SME category, small firms are defined as those employing fewer than 50 employees and medium-sized firms are defined as those employing 50–249 employees. Storey (1994) proposed that “there is no single, uniformly satisfactory definition of a small firm”. As can be seen from the definition of SMEs in Thailand and the UK, SMEs in Thailand were defined as having fewer than 200 employees; SMEs in the UK were defined as having fewer than 249 employees. This shows that, considering the number of employees, the definition of SMEs is defined differently in different countries. Forth et al (2006) noted that several studies have utilised criteria based upon turnover, market share, ownership structure, or even respondents’ perceptions of what constitutes a smaller firm. However, in this study, the size of the firms was categorised based upon number of employees. The mean score of small tyre firms in this study is 8 employees. Hence, firms which have 8 employees or

fewer are considered as “small firms” and those which have more than 8 employees are considered as “large firms”.

In addition, the Thai government recognised that learning and leadership styles play a vital role in developing and transferring knowledge to organisational members and increase productivity, in particularly, in the small retail tyre firms, the Thai government and tyre manufacturers have continually provided the annual meetings for encouraging the managers of the tyre firm to share their knowledge and experience in order to strengthen and enhance the performance of this business sector (Thailand. Economist Intelligence Unit, 2008; Thailand. Marketing Department Michelin Siam Group Co., Ltd., 2009).

In addition, the researcher previously worked as a general manager in a small retail tyre firm in the Northeast of Thailand. With this motive and first-hand knowledge of this kind of business, he was inspired to investigate specifically the relationship between learning styles, leadership styles, and organisational effectiveness of the small retail tyre firm. He hopes that this research may be useful for the governmental sectors or practitioners (i.e. small retail tyre firms and/or Tyre Manufacturers; Michelin Company, Bridgestone/Firestone Company) to extend the implications of this study.

**Table 1: Classification of Small and Medium Enterprises in Thailand**

| Classification | Small firm          |                             | Medium firm         |                             |
|----------------|---------------------|-----------------------------|---------------------|-----------------------------|
|                | Number of Employees | Fixed Assets (Million Baht) | Number of Employees | Fixed Assets (Million Baht) |
| Manufacturing  | >50                 | >50                         | >200                | >200                        |
| Service        | >50                 | >50                         | >200                | >200                        |
| Wholesales     | >25                 | >50                         | >50                 | >100                        |
| Retail         | >15                 | >30                         | >30                 | >60                         |

Source: Adapted from Thailand. Institute for Small and Medium Enterprises

Development, 2008

[http://www.ismed.or.th/SME/src/bin/controller.php?view=generalContents.GeneralContent&form=&rule=generalContents.FMGeneralContent.bctrl\\_Id=273](http://www.ismed.or.th/SME/src/bin/controller.php?view=generalContents.GeneralContent&form=&rule=generalContents.FMGeneralContent.bctrl_Id=273)

As the unit of analysis, and regarding the organisational level, in this thesis small retail tyre firms in the Northeast of Thailand were selected. In addition, the size of the firms was classified based upon the number of employees. This was based on the mean employment size of the sample firms. The mean score of small retail tyre firms in this study is 8 employees. Therefore, the firms composed of 8 employees or fewer are classified as “small firms” and those with more than 8 employees are classified as “large firms”.

In addition, in terms of respondent level, the managers of the small retail tyre firms were selected for survey. However, there are several variables which may be influential in the translation of learning styles and leadership into organisational effectiveness. In terms of organisational culture, Robbins and Judge (2007) asserted that cultures, for example, differ in terms of time orientation, the importance of rationality, their belief in the ability of people to solve problems, and their preference for collective decision making. Some cultures emphasise solving problems, while others focus on accepting situations

as they are. The United States falls into the former group; Thailand and Indonesia are examples of cultures that fall into the latter group. Because problem-solving managers emphasise they can and should change situations to their benefit, American managers might identify a problem long before their Thai or Indonesian counterparts would choose to recognise it as such. The influence of culture may result in managers in small retail tyre firms in Thailand having different approaches to solving problems from those in foreign countries.

Wright et al. (2001) emphasised that it may be significant to rationalise the significance of HR and tendency for the SHRM field to borrow concepts and theories from the broader strategy literature, so the integration of the RBV of a firm into the SHRM literature should surprise no one. In particular, SHRM is devoted to explaining the relationship between the organisational strategy and human resource practices as well as concepts such as knowledge, dynamic capability, organisational learning, and leadership as sources of competitive advantage, turning attention towards the intersection of strategy and HR issues. This may lead to showing that it may be possible that the HRM process, which different firms may focus on differently, plays a role in generating different cultures or mindsets that enable the maintenance of unique competencies.

Forth et al. (2006) found that in SMEs it is normal for employment relations to be dealt with by a manager rather than a personnel specialist. SME managers with responsibility for employment themes are less likely to have a formal

qualification in personnel management or a related area than are managers functioning in this area in large firms.

Nonetheless, they are likely to have more career experience of the personnel role than managers with responsibility for employment relations in large firms. Managers responsible for personnel matters in SME workplaces spend less time on employment relations, but carry out a greater range of tasks than those in an equivalent position in large firms. SMEs make greater use of external advice on employment relations than do workplaces which are part of large firms. Managers in small firms tend to report that they involve employees in decision making when making changes to the organisation. Compatible with this, employees who work for small firms suppose that they have a better degree of influence over the final decisions made by managers. Hofstede (1993, p. 86) also found that among the champions of economic development in the past thirty years are three countries mainly populated by Chinese living outside the Chinese mainland: Taiwan, Hong Kong and Singapore.

Moreover, overseas Chinese play a very important role in the economies of Indonesia, Malaysia, the Philippines and Thailand, where they form an ethnic minority. Hofstede (1993) asserted that, compared to American enterprises, overseas Chinese lack almost all the characteristics of modern management. They are likely to be small, collaborating for essential functions with other small organisation through networks based on personal relations. They are family-owned, without the separation between ownership and management typical in the

West, or even in Japan and Korea. They normally focus on one product or market, with growth by opportunistic diversification; in this, they are extremely flexible. Decision making is centralised in the hands of one dominant family member.

In relation to the small tyre firms in Thailand, the organisational structure of the firm is likely to be centralised; the manager is the person who is in charge in any matters taking place in the firm. Also, the managers in small retail tyre firms in Thailand tend to accomplish a wide range of tasks since they are the person in charge in the firm. In contrast, Thompson and Stickland (2003) argued that many of today's companies are gradually modifying their traditional hierarchical structures, once constructed around functional specialisation and centralised authority. Much of the corporate downsizing movement in the late 1980s and early 1990s was expected to recast authoritarian, pyramid organisational structures into flatter, decentralised structures. They also emphasised that in today's fast-changing markets where many firms are combating for global leadership in their industries and/or racing to build strong positions in the industries of the future, the necessary organisational characteristics are lean, flat, agile, responsive, and innovative. Also, the organisation may need to network with outsiders to improve existing organisational capabilities and create new ones.

In terms of organisational culture, the small retail tyre firms in Thailand may be different from other firms in different regions, due to the influence of the culture

of overseas Chinese. In particular, the small retail tyre firms in Thailand are focusing on one product, which is selling the car tyres. They also offer related services such as wheel balancing and alignment.

In terms of strategic priorities of the business, Thompson and Stickland (2003) proposed that the purpose of setting objectives is to convert managerial statements of strategic vision and business mission into specific performance targets, i.e. the results and outcomes the organisation wants to achieve. Setting objectives and measuring whether or not they have been achieved may assist managers to track organisational progress. Managers of the best performing companies tend to set objectives that require stretch and disciplined effort. This may show that the managers who are seeking competitive advantage may need to consider the strategic priorities of the firm. For the small retail tyre firms in Thailand, the owner of the firm is likely to be the manager; he or she is then deeply involved in setting the strategies for the firm. Different firms may prioritise strategies differently; for example, some small retail tyre firms in Thailand utilise marketing strategies to maintain customer satisfaction by offering service for regular customers; they may be offered free maintenance, such as balancing or alignment. Loyal customers may be given gift vouchers, used as a discount for the next visit. Also, some firms may offer service on the road in the case of emergency.

However, Thompson and Stickland (2003) asserted that the multi-national companies (MNC) who seek international success may need to consider using

local managers to head operations in foreign countries. In addition, they emphasise that a strategic partnership or joint venture can be a useful way to gain access to a new business in at least three types of situations. First, a joint venture is a good way to pursue an opportunity that is too intricate for a single firm. Second, joint venture makes sense when the opportunities in a new industry require a wider range of competencies and know-how than any one organisation can assemble. Third, joint ventures are sometimes the only way to gain entry into a desirable foreign market when market entry is restricted by government and companies must secure a local partner to gain entry. In relation to small retail tyre firms in Thailand, the joint venture may be helpful for the MNC in terms of reducing the risk at their first entry into business in Thailand, in terms of overall market, technical skills, and political barriers.

Hofstede (1993, p. 86) emphasised that the style of the manager in Thailand is influenced by the overseas Chinese, who tend to rely on personal trust to build up a network. In terms of the role of networks and communities of practices, it is possible that the small retail tyre firms in Thailand tend to count on personal trust to build up networks because they may find it more comfortable when dealing with their own nation, the overseas Chinese. This may lead them to create networks among Chinese who live in Thailand in order to share knowledge to sustain their business.

In conclusion, Thailand is one of the South East Asian countries which plays a vital role in the world economy. Thai SMEs are among the most important

business sectors, sustaining the Thai economy overall. Today business is highly competitive, and managing firms more efficiently and effectively is essential. However, the researcher is aware that there are several variables which may be influential in the translation of learning styles and leadership styles into organisational effectiveness, such as organisational/national culture, HRM, organisational structure, strategic priorities of the business, and the role of networks and communities of practice. In this thesis, therefore, to achieve a better understanding of small and medium firms in Thailand, regarding the organisational level, the small retail tyre firms have been selected as the unit of study, and the managers of these firms have been selected as respondents.

#### **4. Research Questions**

To investigate the effectiveness of learning and leadership styles of managers in small tyre firms in Thailand, the following research questions were posed:

1. To what extent are the managers' learning styles, and leadership styles and the organisation's effectiveness correlated?
2. What are the most effective learning styles and leadership styles of managers?
3. Which attributes should managers adopt for developing their learning and leadership styles to effectively and efficiently manage firms?

## **5. Research Objectives**

This study aims to determine the roles of effective managers, and to investigate and clarify the characteristics of effective managers. Hence, there are three objectives:

1. To study the relationships between managers' learning style, their leadership style and the effectiveness of their organisations.
2. To explore and clarify effective learning styles and leadership styles of managers.
3. To consider which attributes managers might adopt in order to adjust their learning and leadership styles to more effectively and efficiently manage their firms.

## **6. Theoretical Framework**

The scope of this thesis is primarily to study the relationships between managers' learning styles, and leadership styles, and organisational effectiveness. In addition, it has been expected that the organisation seeking for improvement and development of productivity focused on quality, cost, innovation in order to defend its market share may then fundamentally affect the relationship explored. The Resource-based view (RBV) and Strategic Human Resource Management (SHRM) were placed to help to explain the process of knowledge transition

which may take place within the firm, and in turn it may lead the organisation to obtain the competitive advantage and then may lead the organisation to reach different level of organisational effectiveness.

**Figure 4: Theoretical Framework**

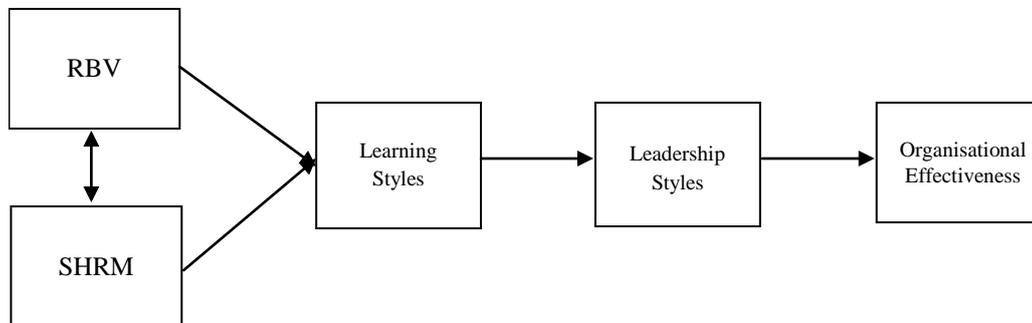


Figure 4 illustrated the link between the resource-based view (RBV), Strategic Human Resource Management (SHRM), Learning Styles, Leadership Styles and Organisational Effectiveness. The concepts of RBV and SHRM are used to explain the translation of learning and leadership styles into organisational effectiveness. In addition, there is the consideration of the continually growing tyre automotive product sector as shown on Figures 2 and 3. Increasing requirements for the use of automobile and tyre products may affect the competitiveness of small retail tyre firms. Furthermore, culture plays a vital role with the small tyre firms since different cultures may create different beliefs

influenced on behaviours (Hofstede, 1993). Robbins and Judge (2007) emphasised that the rational model makes no acknowledgement of cultural differences. However, Indonesians, for example, do not make decisions the way that Australians do. Therefore, it may be important to recognise that the cultural background of the decision maker can have a significant influence on the selection of problem-solving techniques, in-depth analysis, and the importance placed on logic and rationality. Hence, this may show that the different cultures of the decision makers or managers may affect the way they manage firms and in turn lead to different level of organisational effectiveness.

**Figure 5: Specific Form of Theoretical Framework**

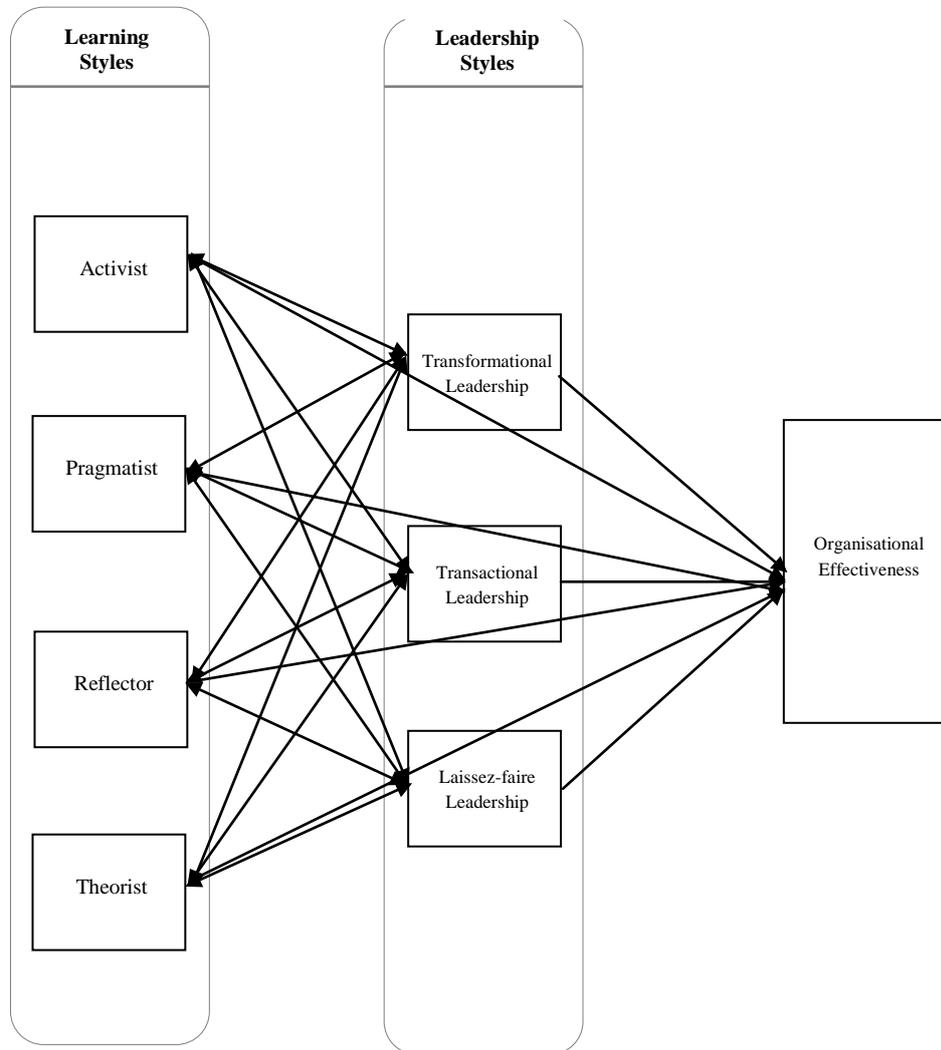


Figure 5 illustrates a more specific form of theoretical framework providing the potential links from sub-factors to learning and leadership styles, as well as acknowledging potential links to organisational effectiveness in order to answer the research questions.

In this thesis, organisational effectiveness was measured by focusing on a subjective approach, based on the perceptions of the managers of the small firms.

The respondents were asked to evaluate their organisational effectiveness based on the financial performance of their firms compared to their competitors in the same business area. Finally, the number of employees, demographics of managers, learning styles, leadership styles and organisational effectiveness were included as means of quantitatively analysing the effective attributes of managers; at the same time, these variables were used qualitatively to explore alternative ways to enhance organisational effectiveness.

## **7. Methodology of Research**

The purpose of this study is to explore the attributes of managers in terms of learning styles and leadership styles which may have an impact upon organisational effectiveness. Small tyre firms in Thailand were selected as the unit of study. Quantitative and qualitative approaches were applied to study the relationship of the variables in the context of this business.

For the quantitative approach, a questionnaire was devised and utilised to collect the data; it was composed of four sections: demographics of respondents, learning styles, leadership styles and organisational effectiveness. Questionnaires were distributed to the managers of small tyre firms in Northeast Thailand. This area was chosen for the study because it is the most densely populated region with approximately 21,386,000 people (Thailand. Ministry of Transportation, 2008). A total of one hundred and forty completed questionnaires were received, which amounted to a response rate of 63.6%. To ensure reliability and validity, a

pilot study was tested before conducting the actual questionnaire. Different statistical techniques were applied to test the relationships between variables, and the Statistical Package for Social Science (SPSS) was utilised to analyse the data (SPSS for Windows, 2006).

For the qualitative approach, semi-structured interviews were used as a tool to answer the research questions. As suggested by Covin and Slevin (1988), firms were categorised into two different groups based on the mean score of organisational effectiveness accomplished by conducting the questionnaire. The research sample was carefully selected, not necessarily to be representative of the entire population but rather to characterise a key aspect of that domain (Gordon, 1999). For a continuous variable, the choices were not so apparent, but the researcher chose sampling from both extreme values, high and low (Gearing, 2007). Ritchie and Lewis (2003) suggested that, in general, qualitative samples for a single case study involving individual interviews, might be below 50. However, it is also essential to make sure that samples are not too small (Mason, 2002). To ensure reliability and validity, a pilot study was carried out before conducting the in-depth interviews. As a result, twenty firms were selected for the in-depth interviews. Nvivo was used to help manage the data (Scolari, 2003).

## **8. Structure of Thesis**

This thesis is composed of seven chapters. The introduction is followed by an overview of the literature. The research methodology is explained in the third chapter, with a discussion of approaches applied to analyse the data. Chapter four examines the descriptive statistics, chapter five reports the results of the quantitative data analysis, and chapter six the results of the qualitative data analysis. The seventh chapter summarises and discusses the results of the findings. The eighth considers the implications and recommendations.

## **9. Conclusion**

This chapter presented the rationale for the research, and reported the reasons for choosing the small tyre firm sector in Thailand for the empirical investigation; this was followed by reporting the research questions and research objectives. The methodology of the research was presented briefly to explain the approaches to analysing the data. Finally, the structure of the thesis was indicated, to guide the reader through the research process and its results.

The literature of organisational learning, organisational effectiveness, learning styles and leadership styles are reviewed in the following chapter.

## **CHAPTER 2 OVERVIEW OF LITERATURE**

### **1. Introduction**

This chapter presents the key literature relevant to the concept of organisational learning, organisational effectiveness, learning styles and leadership styles, and discusses the connections and variations highlighted by existing research and empirical findings to emphasise the concepts extended in this thesis.

### **2. Overview of Literature on Organisational Learning**

#### **2.1 Definition of Organisational Learning**

A large literature is emerging from different perspectives attempting to define organisational learning. A number of scholars make a distinction between individual and organisational knowledge, discuss whether the distinction between tacit and explicit knowledge is useful, and seek to show how knowledge can improve organisational performance. They differentiate between *organisational learning* and the *learning organisation*: the former belongs to theory in various academic fields, and the latter refers to a place where people continually expand their capacity to meet their goals, where patterns of thinking are broadened, and where collective aspiration encourages people in continually

learning to learn (Senge, 1990). Some writers emphasise that organisational learning is a process where the organisation learns through individuals acting as agents for firms and helping the organisation to discover and resolve mistakes (Argyris and Schon, 1978). Others have defined organisational learning as the process that improves actions through new knowledge and understanding; it raises the capacity of an organisation to act effectively (Fiol and Lyles, 1985; Neuendorf, 2002; Slater and Narver, 1995). Also, the organisational learning process is viewed as an iterative one in which the individual's actions lead to organisational interactions with the environment; environmental responses are interpreted by individuals who learn by updating their beliefs about cause and effect relationships (Lee et al., 1992).

A number of researchers have closely connected organisational learning to organisational effectiveness. Dimovski (1994) and Senge (2006) emphasise that organisational learning is a procedure of information acquisition, information interpretation and resulting behavioural and cognitive changes, which have an impact on organisational effectiveness. Pemberton and Stonehouse (2000) propose that organisational learning is an integral feature of the learning organisation that applies its knowledge resources to improving performance. Others emphasise that organisational learning takes place at different levels in the organisation and requires organisational members to contribute in sharing thought and knowledge. They propose that organisational learning is characterised by a complicated relationship among people, their actions, symbols, and processes within the organisation (David, 2005). Organisational

learning is seen as the process of change in individuals, and shared thought and action affected by and embedded in the institution of the organisation: when individual and group learning becomes institutionalised, organisational learning occurs and knowledge is embedded in non-human repositories, systems, structures, culture and strategy (Crossan et al., 1999; Nelson and Winter, 1982; Walsh and Rivera, 1991). Accordingly, organisational learning comprises the continually evolving knowledge stored in individuals, groups, and the organisation; it is required knowledge sharing of different levels of organisational members; and it constitutes the basic infrastructure that supports a firm's strategy formulation and implementation processes.

However, Thompson and Stickland (2003) pointed out that there may be a difficulty in the process of translating knowledge because developing a resource capability in one business nearly always involves much trial and error and much organisational learning. The first step in transferring knowledge from one business to another involves moving people with the requisite know-how to the new business. As a practical matter, resource transfers require the receiving business to undergo significant organisational learning and team building on its own to get up to speed in executing the transferred capability. Hence, it takes time, money, and patience for the transferred capability to become operational. It appears that the process of transferring knowledge within the organisation requires a great deal of time, money and effort and therefore it may not be appropriate for every organisation. It could also be argued that there may be gaps during the process of organisational learning due to cultural differences. As

emphasised by Hofstede (1993), “there is no such thing as universal management theories”. This may imply that the process of organisational learning may not occur in every organisation since different organisations may have different cultures.

Ultimately, organisational learning can be defined as the ability of organisations to adapt to their environment to create, generate, disseminate, and apply knowledge, in which the manager is the key person who encourages organisational members to fully participate in creating the learning environment and sharing knowledge among themselves, in order to improve organisational effectiveness.

## **2.2 The Concept of Organisational Learning**

The resource-based view (RBV) of the firm is incorporated into the exemplar for research related to organisational strategy, simplifying sources of competitive advantage (Barney, 1991). He also recommended that different levels of organisational effectiveness may be clarified by different kinds of resources and diverse capabilities. In addition, the RBV perspective envisions the organisation as a unique bundle of accumulated resources (Barney, 1991). On the contrary, Griffith et al. (2006) argued that it is not resources that provide competitive advantage, but the translation of resources into capabilities. They also suggested that it is through the conversion of resources into capabilities, such as market responsiveness, that small retailers achieve competitive advantage. However,

Mavis (2009) argued that the relationship may not be valuable to all retail firms under all conditions.

Wright et al. (2001) proposed that growing acceptance of internal resources as sources of competitive advantage has brought legitimacy to HR's assertion that people are strategically significant to a firm's success. Wright et al. (2001) also recommended that it may be important to justify the value of HR and the tendency for the SHRM field to borrow concepts and theories from the broader strategy literature; the integration of the RBV of the firm into the SHRM literature should surprise no one.

In particular, SHRM was devoted to explaining the relationship between the organisational strategy and human resource practices as well as concepts such as knowledge, dynamic capability, organisational learning, and leadership as sources of competitive advantage, turning attention towards the intersection of strategy and HR issues (Wright et al., 2001). Similarly, Lengnick-Hall et al. (2009) comprehensively explain how the resource-based view of the firm could be applied to SHRM; the construct of human resource advantage was defined as consisting of two components: human capital advantage and organisational processes advantage. Human capital advantage results from having better people than do the competitors, while organisational processes advantage stems from having greater ways of performing than competitors. They also highlighted that the challenges of HR advantage change across different stages of an organisation's life cycle.

Lengnick-Hall et al. (2009) elaborated that HR scholars recognised that particular sets of HR practices were likely to yield better performance if they were matched with specific objectives, conditions, and strategic interests. For example, previously, Miles and Snow (1984) had proposed a strategy typology (Defenders, Prospectors, Analysers, and Reactors) that showed how specific sets of HR practice could be matched to each strategy. This perspective on SHRM would later be described as a contingency approach, meaning that the choice of a particular set of HR practices is dependent upon an organisation's strategy. Recently, Richard et al. (2007) studied the impact of a diversity HR strategy in manufacturing versus service-oriented industries, and in munificent versus resource-scarce environments. They conducted a firm-level, 6-year longitudinal study and found a U-shaped relationship between racial diversity and productivity which was stronger in service-oriented than manufacturing-oriented industries and stronger in more stable than more volatile environments. Moreover, they discovered support for a positive and linear connection between racial diversity in human resources and organisational performance that was stronger in munificent than resource-scarce environments.

Wright et al. (2001) asserted that SHRM provides understanding related to generated knowledge regarding the attraction, development, motivation, maintenance, and relation of people; in particular, a variety of work in the strategy literature within the RBV paradigm has focused on knowledge; similarly, effort to understand how firm generate, leverage, transfer, integrate and protect knowledge has moved to the forefront of the field (Nonaka et al., 2000).

Grant (1996) argued for a knowledge-based theory of the firm, saying that firms exist because they incorporate and apply specialised knowledge. Wright et al. (2001) suggested that knowledge can be viewed as something that characterises individuals, but that it can be shared within groups or networks or institutionalised within organisational processes and databases.

In addition, several scholars have endeavoured to apply RBV to theoretical development within SHRM to investigate whether there is relationship between HR and organisational effectiveness. For example, Huselid (1995) argued at a general level that HR practices could help be a source of competitive advantage, particularly if they are aligned with the organisational strategy. He found that there is a relationship between HR practices (or High Performance Work Systems) employee turnover and gross rate of return on assets. Wright et al. (1995) applied RBV framework to study the HRM of basketball teams. They concentrated on the skills of the team members and experience of the coach. They found that there is a connection between certain skills and team performance depending on the strategy in which the team was engaged. In addition, their results showed that teams whose coaches were using a strategy different from their preferred strategy performed lower than teams where the coach was able to use his preferred strategy. Huselid (1995) pointed out that the effectiveness of even highly skilled employees will be limited if they are not motivated to perform. He suggested that HRM practices can affect employee motivation by encouraging them to work both harder and smarter job security is also considered as an important factor for the employees.

Likewise, Guest and Conway (1997) studied the relationship between psychological contract and HRM practices; they found that there was a positive connection between psychological contract and higher job satisfaction, higher organisational commitment, higher reported motivation and a positive evaluation of employment relations as well as lower intention to quit. This showed that it may be important for firms to motivate employees and pay attention to the psychological contract in achieving employees' satisfaction and commitment to work at their best.

Bailey (1993) found that the contribution of even a highly skilled and motivated workforce will be limited if jobs are structured, or programmed, in such a way that employees, who presumably know their work better than anyone else, do not have the opportunity to use their roles. So, HRM practices can also influence organisational effectiveness through provision of organisational structures that encourage and motivate participation among employees and allow them to improve how their jobs are performed, for example by cross-functional teams, job rotation, and quality circles.

However, Huselid (1995) suggested that there may not be a direct link between HR practices and organisational effectiveness because even though he found the relationship between HR practices and organisational effectiveness, he did not conclude that there is a direct relationship between HR practices and organisational effectiveness unless the HR practices are aligned with organisational strategy. MacDuffie (1995) also argued that HR practices are not

likely to contribute to improved organisational effectiveness without all these conditions being present; skilled and knowledgeable employees who are not motivated are not likely to contribute any discretionary effort. It is also possible that motivated employees who lack skills or knowledge may contribute discretionary effort with little impact on organisational effectiveness. Even if innovative HR practices generate skilled and motivated employees, the HR system must be integrated with the firm's production strategy for discretionary effort to be appropriately channelled towards performance improvement.

Mabey and Ramiraz (2005, p. 1078) agreed that if management development is to have a demonstrable effect on a firm's productivity, then it seems that a long-term, strategic and consistent approach to MD needs to exist, although this alone is not sufficient. It is essential that those managers who participate in MD give credence to this. There must be a belief on the part of line managers that MD is prioritised to such an extent that it is firmly anchored in the company, both organisationally and strategically, and that it contributes to helping the firm to solve real business problems; in short; a perception that top management in their organisation are fulfilling their promises with regard to MD. Guest et al. (2003) also disputed that the organisations seeking for competitive advantage, attempting to acquire and use valuable scarce and inimitable resources, may need to pay attention to the HR practices and management of the organisational structure. This may suggest that there may be other factors driving the success of the organisation, such as the organisational structure, which may allow

employees to fully apply and practise their skills within the workplace (Huselid, 1995), excluding the direct link between HRM and organisational effectiveness.

Guest et al. (2003) asserted that the association between HRM and performance may be based on two linked arguments. The first link may be that the effective deployment of human resources offers one of the most powerful bases for competitive advantage. The second may be that effective deployment of human resources depends on the application of a distinctive combination of practices, sometimes described as bundles of practices (MacDuffie, 1995). While HRM has also been considered as a concept which sustains management development, it was chosen to study whether a link exists between HRM and organisational effectiveness. Mabey and Gooderham (2005) found the critical links in the chain between a firm's HR investment in managers and its performance. They suggested that it is possible that too much management development activity could actually be built up as destructive outcomes by various organisational stakeholders. They raised an example that line managers may feel overloaded, and poorly equipped and rewarded for devoting time to evaluating, planning and reviewing the development of their organisational members.

In addition, Mabey and Gooderham (2005) explained that the top managers may form the view that such activities are costly and distract time and effort away from immediate business concerns; and HR specialists may call for frequent changes in strategic priorities, which destabilise succeeding efforts to entrench learning into organisational routines. Guest et al. (2003) criticised several

researchers who have shown a relationship between HRM and organisational effectiveness, either at the same point in time or over time. This demonstration of the relationship is an important step in advancing research but leaves uncertainties about the causal relationship. So, there are possibilities that HRM may be associated with organisational effectiveness or it may be possible that the firm with enough resources may attract the skilled employees which may lead to better organisational effectiveness. The question whether HRM causes improved organisational effectiveness remains.

Fleetwood and Hesketh (2006) commented that researchers may need to be aware in investigating the relationship between HRM and organisational effectiveness of events observed as necessary for concern for the researcher. They raised the study of Huselid (1995, p. 648) as an example, that “a one standard deviation increase in High Performance Work Practices (HPWP) yields a \$27,044 increase in sales and a \$3,813 increase in profits”. This is not deterministic. Huselid is not claiming that all firms in the sample who used these practices experienced increases in sales and profits of these magnitudes. It is stochastic because he is claiming that certain firms in the sample who used these practices experienced average increases in sales and profits of these magnitudes. This shows that the researcher may need to be aware in explaining the results that not all firms equally attain improved organisational effectiveness from applying HPWP, since the average form of data was utilised. In addition, Fleetwood and Hesketh (2008) suggested that systems are defined as “closed” when they are characterised by event regularities and “open” when they lack event regularity.

So, a system may not be simply predictable, as the social world is complex, contingent and emergent. What transpires in one organisational setting does not necessarily prevail in another.

Furthermore, they criticised researchers' claim to predict improved organisational performance following the creation of certain HR practices; occurrence of the latter does not explain the increased performance. Researchers may need to explain the relationship between HR practices and performance based on theory which could explain the reason why there is a connection between those variables. Some theories are appropriate in explaining the relationship between HR practices and organisational effectiveness, but some are not.

Wright et al. (2005) recommended that researchers who are exploring the relationship between HR practices and organisational effectiveness may need to consider the conditions necessary for making valid causal inferences. Researchers seek to demonstrate a link between HR practices and performance in an effort to offer decision makers the causal inferences necessary to justify developing and implementing these practices in order to increase performance. Consequently, this vein of research, to fulfil its ultimate goal, must provide research that maximises the validity of the proposed causal inferences. However, they do emphasise that existing research, although consistently demonstrating covariation, has paid inadequate attention to temporal precedence and/or alternative explanations. They emphasised that "it is important to note that

research built predominantly around survey methodologies can never match the ability to demonstrate both temporal precedence and control of alternative explanations that exist in laboratory experiments” (p. 411). So, they are aware that any survey design cannot eventually “prove” cause in either direction. Nevertheless, they consider that existing research, although consistently demonstrating covariation, has paid insufficient awareness to temporal precedence and alternative explanations. This shows that the researcher who is investigating the relationship between HR practices and organisational effectiveness needs to be ware of how best to deliver the results, by offering the causal relationship between those variables or by offering an alternative explanation which is reasonable to guide managers to make decision and appropriately apply HRM.

However, while the HR practices are considered as a sub-field of SHRM in sustaining knowledge in the firm and providing competitive advantage, Wright et al. (2001) observed that it has not been particularly successful yet at classifying who the focus of these systems should be on and why. Dyer (1984) noted that managers are frequently admonished to make crucial human resource decisions that are consistent with organisational goals. This may imply that the decision making of the managers related to HRM may affect the organisational goals. However, Wright et al. (2001) argued that the RBV of the firm in empirical SHRM research entails focusing primarily on the competencies and capabilities of firms and the role that people management systems play in developing organisational effectiveness. It requires recognising that the inimitability of these

competencies may derive from unobservability (causal ambiguity) complexity (social complexity) and/or time compression diseconomies (path dependence). This implies that rather than simply positing a relationship between HR practices and sustainable competitive advantage, one must realise that people management systems might impact this advantage in a variety of ways. The systems might play a role in creating cultures or mindsets that enable the maintenance of unique competencies. In addition, these systems may promote and maintain socially complex relationships characterised by trust, knowledge sharing and teamwork. Also, these systems might have resulted in the creation of a high quality human capital pool that cannot be simply imitated because of time compression diseconomies.

Understandably, the sources of determined competitive advantage and greater organisational effectiveness that the firms achieve may derive from the diversity of knowledge bases and capabilities developed throughout HR practices among the firms. More importantly, Wright et al. (2001) highlighted that there is a need to understand how to manage the basis for understanding the value of knowledge to the firm whilst the HR field lacked such a perspective, but it has provided more theory and research regarding how knowledge is generated, retained, and transferred among organisational members involving the firm.

In relation to recent research focusing on strategy, organisational learning was seen as one of the most promising concepts in strategic management literature in the late 1980s in relation to the concept of competitive advantage (Torrington et

al., 2005). However, the organisational learning concept extends far beyond a single area and is embedded in different disciplines, including contingency theory, organisational development, industrial economy, information theory and system dynamics, system theory, management science, production and operation management, social anthropology, sociology, psychology, and organisational theory. It is founded on varied theoretical assumptions that should be viewed as complementary to each other in the understanding of organisational learning (Dodgson, 1993; Easterby-Smith, 1997; Romme and Dillen, 1997; Shrivastava, 1983).

In addition, Forth et al. (2006) pointed out that SMEs were less likely to use formal channels of recruitment than were larger firms. This appears to be related to the lower prevalence of personnel experts in smaller firms. Small firms tend to offer less off-the-job training than medium-sized and large firms. However, where small firms do have off-the-job training, the number of days provided is close to that presented by larger firms. As there was no verification of employees being any the more likely to be over-, or under-skilled in SMEs, it appears that smaller firms replace off-the-job training with on-the-job training.

However, Robbins and Judge (2007) proposed that the organisation which seeks to increase the capabilities of its employees may need to invest in off-the-job training such as internet courses, public seminars, self-study programmes, group activities that use role plays, and case studies. So, this may show that small firms

seeking to develop the skills of their employees may need to invest in off-the-job training along with encouraging on-the-job training within the workplace.

To elaborate, Macpherson and Holt (2007) found that in the small firms, resources are indispensable for opportunity recognition and innovation, while managerial resources are necessary to provide systems and processes to facilitate opportunity exploitation. So, the development may be associated with the procedure through which knowledge is attained and implemented. Thus, the possession of knowledge may characterise the level of the organisational effectiveness (Goffee and Scase, 1995). Macpherson and Holt (2007) studied the relationship between the transition of knowledge and organisational effectiveness. They found that the capabilities of the manager, the managers' role in creating the organisation, or their relationship to their network may affect the translation of knowledge into organisational effectiveness. They considered manager capabilities as acquirable assets whose ownership has a fundamental influence on organisational effectiveness.

Furthermore, Andren et al. (2003) suggested that in general assets are products of past experience. They also emphasised that it is possible to develop interpretive and flexible management skills through experience, as managers adopt their plans in response to the changing environment, provided the managers remain open to learning from experience. In terms of the sources of learning, the managers may obtain this from industry-related experience, "soft managerial skills" and business experience of formal training (Jo and Lee, 1996; Leach and

Kenny, 2000; Olson and Bokor, 1995). Kakati (2003) asserted that former functional, technical and managerial experience may provide critical knowledge resources, including marketing, human resource management, communication, managing change and finance. However, Kaulio (2003) noted that in case those skills are deficient, he recommended that talent may be hired as experts including a wider managerial team, or consulted, to overcome crises or better make the most of market trends. So, this may imply that the human capital becomes more important as firms grow.

Choi and Shepherd (2004) proposed that technology strongly supports organisational effectiveness, but remains influenced by the managers' decision-making and technical ability. Georgellis et al. (2000) discovered that innovation in products and services are connected to providing competitive advantage. While the system may be restricted by the managers' prior experience, Brush and Chaganti (1999) emphasise that the managers' human capital is expanded through the introduction of systems of organising. Occasionally these systems are adopted from formal training to address specific problems such as quality, from customers or business support agencies, or from specific techniques such as HRM policies (Patton and Marlow, 2002).

However, Lindelof and Lofsten (2004) illustrate that the network or managers' social capital could only happen through specific rational and attitudinal skills embodied in key individuals who act to co-ordinate and build trust between co-located firms. Several researches have also emphasised that successful

knowledge transfer and learning through networks requires specific social skills. Either attitudinal or relational competences or both are required to maintain effective and co-operative network interactions (Blundel and Hingley, 2001; Perren, 2002). Nonetheless, Macpherson and Holt (2007) also explain that social capital is limited by prior experience and an often restricting preference for informal and social contacts. In order to be beneficial in the long term, networks need to be extended beyond local social and industrial contexts. In this regard, networks and networking activity can be sustained by a mixture of outside private and public agencies to facilitate knowledge transfer and organisational effectiveness, and to develop sustainable human capital within the firm. However, they also note that to capitalise on knowledge available through a firm's social capital, attitudinal and relational competences appear to be necessary.

In addition, Barnett and Storey (2001) explicate that managers' influence is not only on organisational structures, but also on the cultural foundation of the organisation. Gray and Gonsaves (2002) assert that it is important that managers reflect decisively on routines and be hands-on in implementing both structures and cultures that maintain innovative behaviour. However, it is worth noting that regarding the cultural differences, it is possible that different cultures may influence and maintain the process of knowledge transition differently.

Additionally, Young et al. (2003) suppose that firm specific factors such as size, affordability and the available management experience would influence the

suitability and adoptability of systems. For the small and most informal firms, it appears that the choice of technology adoption will be curtailed. Smith et al. (2002) argue that different firms may have benefited from technology adoption differently because of the level of skills and experience existing within the firm; a blanket approach to technology adoption and policy support is unlikely to be practical. So, knowing when, how and what systems are appropriate seems to be a key function of managing development.

Finally, organisational learning may be a useful process, requiring time and resources to influence effective change and in turn sustain the company's competitive advantage. In addition, the knowledge transition only happens under the constraints related to influential factors; culture, network, technology and manager's decision-making. This implies that this system is not likely to happen in every organisation. Therefore, the organisation which desires to continue to develop may need to consider encouraging the process of knowledge transition within the workplace.

### **2.3 The Importance of Organisational Learning**

Recent researchers have asserted that the majority of top management have realised that even though they emphasise hard work and raising productivity, this alone would not take them to the next stage of development. If a company had persistently expanded and there is a lot of competition in the industry, it is

insufficient to continue to conduct business in the same way (O'Brien and Buono, 1999). It appears that the organisations which continue to learn are competitive and at the leading edge of their fields of business, able to create their own futures instead of being carried along by events (Correll and Gregoire, 1998).

Furthermore, it has become clear that more strategic planning is needed, as well as better processes and systems to support a company's growth; therefore, sharing information and knowledge among the organisational members is somehow supportive to the organisation. In order to improve performance and succeed, an organisation may create an environment of collective learning, and persuade organisational members to learn how to discover and resolve mistakes. To do so, organisations may consider to maximise use of organisational resources including intangible resources (Slater, 1997; Day, 1994). Intangible resources are a particularly valuable source of competitive advantage because they are difficult to imitate. If those resources can be made to give competitive advantage, they are considered 'strategic' and they constitute a kind of capital, as described by (Edmondson and Moingeon, 1996). As organisational learning includes correcting and resolving error, sharing information among members, and the creation of new knowledge (Small and Irvine, 2006), it is clear that it is one of the intangible resources, being difficult to imitate and transfer. It involves interconnecting the collection of both administrative and human skills. It also facilitates organisations in translating short-term gain into long-term competitive advantage. Eventually, it enables an organisation to continually expand its capacity to create its future (Arthur et al., 2001; Senge, 1990).

Furthermore, a number of researchers propose that organisational learning is associated with different levels of the organisation (Argyris and Schon, 1978; López et al., 2005; Murray, 2003). It is referred to as the long-term investment in today's business. Unfortunately, small businesses tend to concentrate on accomplishing short-term objectives rather than using organisational learning to improve performance in the long term (Garvin, 1993). Irrespective of focusing on long-term investment in small firms, it is difficult to apply the learning or knowledge development cultures to today's business environment. In order to sustain a competitive edge, Pemberton and Stonehouse (2000) suggested that organisations should learn more quickly than their competitors, and as a consequence deploy their knowledge assets most effectively.

## **2.4 The Process of Organisational Learning**

Anthony (1995) asserted that organisations are considered to have learning abilities. Organisational learning is mainly associated with the constant generation of new knowledge vis-à-vis existing resources. The main purposes of organisational learning are to develop new knowledge in the organisation, and to create more efficient and effective management of the resulting organisational assets. Organisational learning requires organisations to provide generative learning, building new competences, and identifying and creating opportunities based on leveraging existing competences, to generate new business opportunities (Senge, 1992). To encourage generative learning, the organisation may create a learning environment for organisational members to develop their

skills, based on their experience in rectifying errors. When this knowledge is shared with others, it can influence organisational members' skills.

However, to have superior business performance, an organisation may need to encourage learning, and try to discover how to tap people's commitment and capacity to learn (Senge, 1992). It appears that collaboration by organisational members is needed to develop knowledge and learning within the organisation, in order to sustain the organisation and truly excel in the future. It might be helpful to employ a variety of experiential standards, including rope courses, role play, simulations, and such, so that people could access richer feedback about themselves or their work setting; organisational member may need to be encouraged to develop their own 'emergent' theories when diagnosing problems and to engage in action learning efforts, guided by repeated feedback loops, to address them (Tichy et al., 1992). Moreover, recent research has shown that a wide variety of mechanisms are effective for knowledge transfer in organisations. These mechanisms include training, communication, observation, personal movement, presentations and interaction with manufacturers and customers including technology transfer, reverse engineering of products, patents, and the replication of routines (Argote et al., 2000).

Likewise, Mumford (1994) also suggested that the basic component of management development in the most organisations are; a review of existing resources, and the extent to which these meet organisation needs, a process for moving people around the organisation with the conscious objective of providing

different learning opportunities, the use of internal and external courses (p. 80). In addition, there are various ways in which organisations can attempt to create and maximise their organisational learning. For example, Baldwin et al. (1997) asserted that Motorola succeeded in applying organisational learning, resulting in improved quality in the firm. Its emphasis on engineering and technical concerns resulted in a much earlier and complete embrace of the total quality mission by product manufacturing groups than by others. As a culture that heavily rewards discrete product group performance, total quality in products and processes that require integrated, inter-group action lags behind, particularly in the marketing of systems that cut across divisions.

Further, the Mutual Funds Marketing Groups strive to develop a more collaborative culture and base their learning more on the work of cross-functional work groups and improved communication (DiBella et al., 1996). Organisations need to challenge their own homogeneity of thinking by seeking board members with positive sources of difference (Herriott and Pemberton, 1995). So, these two companies emphasised organisational learning in different functions within the organisation; Motorola encouraged learning by providing rewards looking at both the quality of products and process, while the Mutual Funds Marketing Groups focused on sharing knowledge among organisational members. These two companies are only an example of organisations encouraging learning; however, for other organisations, especially SMEs with different levels of resources (employees and investment), the result of applying learning in the organisation may be varied.

In addition, Sadler-Smith et al. (2001) explored the relationship between the concept of organisational learning and organisational effectiveness focused on sales growth in the small firm sector. They attempted to identify the particular behaviours that distinguish high-growth small firms from their slow growing or declining counterparts. Samples were collected from 300 managers of small firms in the manufacturing and service sectors. They found a potential relationship between learning in the small firms and their organisational effectiveness. They also suggested that the managers in the small firms who wish to exploit the firm's knowledge assets as a source of competitive advantage should reflect critically upon existing organisational routines and consider the ways in which a more active learning orientation may be recognised. They also emphasised that learning orientation may be composed of information allocation, employee participation and contribution; the active elicitation of feedback on products and services from employees, customers and competitors; acting upon feedback and information inspected from the external environment; the use of small-scale experiments; and the regular review, maintenance and renovation of existing routines.

Furthermore, Nonaka and Takeuchi (1995) highlighted that the learning process in a firm is relatively extensive. It involves the process of obtaining knowledge from the existing organisation, combining knowledge, data and previous experience, and the generation of new uses for the resources. So, organisations should seek to learn the processes by which individual and organisational learning takes place in other business areas (Huber, 1991). In addition, previous

research confirms that organisational learning can arise only with the commitment and strong support of top management and decision makers. It is therefore apparent that the manager may be the key person to encourage and sustain the learning environment within the organisation. The manager should encourage subordinates to continually develop the sharing of ideas, trust, experimentation and external vision (Karl and Philip, 1987).

Knowledge sharing is essential to the creation of new knowledge and competences, as well as in the dissemination of new knowledge throughout the organisation and between the organisation and collaborating businesses (Pemberton and Stonehouse, 2000). Hence, in organisation, the manager may be one of the most important drivers, who helps to create the learning environment in the organisation. He or she should also expect errors and undertake action as experiments and carry on to learn more and continuously improve by applying new knowledge. Further, Vincent and Ross (2001) have verified that the manager is responsible for making employees globally competitive. Managers should become active partners in establishing their businesses as learning organisations capable of preparing entry-level workers and upgrading current employees, encouraging them to develop their skills by providing an appropriate learning environment through training within the organisation.

In order to train employees effectively, it is apparent that managers need to understand their own learning styles (Honey and Mumford, 1992; Stevens and Frazer, 2005), enabling them to take advantage of learning opportunities and

improve the learning environment. Managers need to be better equipped to help themselves and others to learn. In addition, academic researchers have demonstrated that learning styles give managers more insight into generating a learning environment for their employees and developing their learning experiences effectively to transfer knowledge to their employees (Honey and Mumford, 1992).

Chang and Lee (2007) and Aragon-Correa et al. (2007) have found that the type of leadership and organisational culture can positively and significantly affect the operation of organisational learning. In addition, this operation significantly affects employees' job satisfaction. Another study which investigated 408 large firms in four sectors also found that leadership had a significant influence on organisational learning with managers who recognised knowledge as a critical resource having a positive attitude towards organisational learning (Pham and Swierczek, 2006). However, there is a possibility that managers who do not have a positive attitude towards organisational learning may manage their firms differently.

Also, Kahn et al. (1964) found that there is a direct relationship between context and leadership behaviors. Some managers will experience organisational role expectations and role pressures differently from others, which ultimately leads them to utilise different leadership behaviors within the same contexts. To elaborate further, the leader's role is to develop a shared vision, provide the resources needed, delegate authority, and celebrate learning successes (Senge,

1990). This supports the findings of previous studies, that the manager is responsible for creating a suitable environment for learning (Garvin, 1993). From these studies, it is clear that there is the link between leadership and organisational learning; the manager plays a vital role in developing learning in the organisation through their vision and empowerment.

Further, most managers generally have a broader perspective and more connections to other parts of the organisation, so they often see where the problems begin and how they might be resolved (Jeffrey, 2005). Managers frequently elicit compliance through their powerful personalities (Calhoun and Starbuck, 2005). Some researchers also propose that ‘without the appropriate leadership the organisational learning could not happen’; they identify three critical leadership roles: designer, teacher and steward. As designer, the manager needs to engage employees at different levels in designing the vision; and design processes for strategic thinking and effective learning processes. As teacher, the manager needs to help organisational members gain more insight into the organisational reality, to coach, guide and facilitate, and help others bring their theories into use. As steward, the manager needs to demonstrate a sense of personal commitment to the organisation’s mission and take responsibility for the impact of leadership on others (Senge, 1990). This implies that managers can improve and accelerate the process of building and applying new knowledge (Pemberton and Stonehouse, 2000). So, the manager acts as a vehicle for focusing on the perspective of learning and related activities. Knowledge comes from both formal teaching and personal experience (Smith and Lyles, 2005).

Organisation seeks to success its mission in the modern world, where management takes precedence over process or operation and human resource management (Hulme, 2006). Youndt et al. (1996) found that there is a strong correlation among operation, human resource, and firm performance. Since organisational learning takes place at different levels, and in turn improves organisational effectiveness, providing appropriate human resource policies and practices are one of the most important challenges for organisations in reaching out to their employees (Guest et al., 2003).

The findings of recent research which questioned over 200 manufacturing firms to investigate the relationship between a firm's use of flexible work practices, human resource systems and industrial relations with corporate performance, show that a lack of employer commitment to job security, low levels of training and low levels of human resource sophistication are negatively correlated with corporate performance. Similarly, the results show that high commitment in organisations is positively correlated with good corporate performance (Michie and Sheehan-Quinn, 2001). Other researchers agree that human resource management is one of the most important factors in maintaining organisational learning (Vincent and Ross, 2001).

Likewise, (Hofstede, 2001, p. 29) emphasised that uncertainty avoidance is related to "the level of stress in a society in face of unknown future". Everyone perceives uncertainty but the ways people cope with it are different. In organisations, uncertainty is often related to the environment and common

coping mechanisms include technology, rules, and rituals (Hofstede, 1980). In relation to cultural differences, different organisations may have diverse levels of uncertainty avoidance. So, this shows that it is important for the organisation to maintain employee satisfaction. In order to achieve this, the organisation may need to apply appropriate SHRM through HR practice. For example, Takeuchi (2009) studied the relationship between human resource policies with business strategies and the organisational effectiveness of Japanese manufacturing firms. He found that it is partially true to emphasise that there exist some elements of convergence in the relationship between HRM and organisational effectiveness in Japan. He also recommended that the high performance HRM and policies and practices should be universally applied to a variety of industries and organisations, and benefitting firms in any location that implement such best practice. Hofstede (2001, p. 29) suggested that long-term versus short-term orientation is related to “the choice of focus for people’s effort: the future or the present”. He also said that people working in settings with long-term orientation emphasise the development of social relationships and market positions, link up business and family issues, and draw high levels of satisfaction from daily human relationships.

In contrast, employees in organisations with a short-term orientation draw less satisfaction from daily human relationships, tend to separate family and business issues, and usually focus on short-term results. Hofstede (2001, p. 29) also said that individualism versus collectivism is about the “integration of individuals into primary groups”. It is manifested in the ways people from different societies live

together. It reflects people's expectations in taking care of themselves or receiving care from their peers (Hofstede, 1980). Similarly, Shore and Tetrick (1994) recommend that the key outcomes for employees are fair pay, good working conditions and job security. Guest and Conway (1997) studied the relationship between psychological contract and HRM practices, confirming that the representative 1000 employee sample of the U.K. working population, and adopting an employee perspective, indicated that the state of the psychological contract was explained by greater reported use of progressive human resource management practices, by the presence of an organisational climate that can be characterised as one of high involvement and partnership and by future expectations of employment security. There was a positive relationship between psychological contract and higher job satisfaction, higher organisational commitment, higher reported motivation and a positive evaluation of employment relations as well as lower intention to quit. Guest (1998) said that employees were viewed as rugged independent individuals offering knowledge and skills through a series of transactions in the labour market.

Furthermore, Walton (1985) and Morris et al. (1993) found that organisations are increasingly seeking to develop committed workers in an effort to drive down employee turnover and absenteeism, while improving individual performance and job-related attitudes. Podsakoff and MacKenzie (1997) suggested that there is growing awareness that employees' positive work attitudes and discretionary behaviour are important factors affecting organisational effectiveness. Hence, encouraging learning in the organisation may be important in considering how to

maintain employees' psychological contract, satisfaction and commitment through HRM practices, in order to reduce employees' turnover and absenteeism and to develop employees' skills and improve organisational effectiveness.

In addition, different firms may target different organisational goals, and may apply different strategies through organisational policies in achieving their organisational goals. For example, Konzelmann et al., (2005) proposed that Wal-Mart, American discount retailers, thrives on low living standards. From Sam Walton to current CEO Lee Scott, the company's sales revenues have relied primarily on low-income customers. The company's operating success at home and abroad has, as its signature slogan suggests, hinged on its ability to offer bargain-conscious customers "everyday low prices". This being the case, constant cost cutting is compulsory and Wal-Mart therefore has an almost single-minded focus on reducing costs, which permeates throughout the organisation. Konzelmann and colleagues also asserted that the strategy related to the labour extraction process presenting another opportunity for Wal-Mart to cut operating costs is that Wal-Mart has developed oppressive labour recruiting and supervising strategies that enable it to obtain a stable supply of low-wage employees who have limited employment options and are therefore willing to admit the terms and conditions offered. Managers seemingly consent to work long hours for modest base salaries in the expectation of receiving large performance bonuses and then retiring before the associated stresses take their toll. Hourly workers agree to work for low wages, poor benefits and exacting supervisory demands out of diverse combinations of fear of losing their job,

personal pride in a job well done and misplaced loyalty to a company that promotes a few from the ranks but otherwise seldom responds.

Lawton (1999) identified Ryanair as another company focusing on pricing and cost-cutting strategies. Its strategy was clearly offering low cost service to the market, a cost conscious group. However, its strategy may result in critical incidents to the company. For example, in most airports, Ryanair has no customer service personnel, which makes it difficult for passengers to contact the airline when problems arise. This is most problematic when delays are experienced; or when services are cancelled due to weather conditions or other unexpected incidents. For a service company, customer service is a key determinant of distinctive capabilities. So, in this case, contributing to cost reduction may be damaging Ryanair's competitive foundations.

Similarly, Lawton (1999) pointed out another problem originating from labour turbulence at Ryanair, as observed in the baggage handlers' disagreement of early 1998. Although the dispute in question involved only 3% of Ryanair employees, many flights were cancelled and Dublin Airport was forced to shut down completely for one day as a direct result of the strike action. These events served to undermine public confidence in the company. Such conflict is associated with the fact that Ryanair refuses to recognise trade unions, preferring to negotiate directly with workers on issues of pay and conditions. The baggage handlers' dispute arose because a section of Ryanair baggage handlers at Dublin

Airport insisted that a trade union represent them in their bid to improve wages and working conditions.

In contrast, Guest (1987) studied the diversity of views concerning what constitutes best practice. Former students of the Diploma in Personnel Management, at the London School of Economics, most of whom are now in senior management positions, were surveyed. Respondents were asked whether there was a company which they considered as a model of good personnel management practice and if so, on what criteria they made this judgement. Almost 40 per cent of the sample of 136 could not identify any company they could describe as a model. Of the remainder, approximately half of the respondents emphasised that Marks and Spencer has been considered as the model. There were four distinct views for identifying the criteria used to describe best practice.

- A human resource model: this was characterised as being people-oriented throughout with an ethic of respect for the individual, maximisation of individual talent, well developed, well integrated policies and practices, genuine consultation and involvement, and clear challenging goals with feedback. The only companies described in terms of this model were IBM and Hewlett-Packard.
- A paternalist welfare model: this was characterised by a concern for the customer, leading to careful selection, training and treatment of

staff, a concern for staff resulting in excellent staff management and welfare facilities, and a senior management in touch with and responsive to the concerns of staff, community and customers. Marks and Spencer was the main example of this model.

- A production model: this was characterised by close integration with the business; thorough, tough, expertly handled and consistent practices, especially in industrial relations, and first-class systems to support “line” (i.e. production) goals and in particular to maintain continuity of production. Ford was identified as the leading example of this model.
- A professional model: this was characterised by personnel departments staffed with high quality “professional” personnel managers, well established and well integrated into the business and valued by line management. There was demonstrably high competence in the four core activities of selection, training, pay and industrial relations, and the personnel departments were often innovative within these core areas. Several companies were identified which fell into this category, including ICI, BAT, Unilever, British Airways and several of the major oil companies.

In addition, Baden-Fuller and Stopford (1992) suggested that, particularly in the service sector companies, it is necessary to focus on the key capabilities received

from human resource management and customer services. Long-term competitive advantage is formulated upon the relationship between the organisation, employees, and customers as well as the reputation that is built on the basis of reliability and quality of service. Hence, in the case of Wal-Mart and Ryanair, the cost-focused companies may not pay attention to human resource management especially in relation to maintaining employee satisfactions. On the other hand, there are several companies which are quality-focused, such as Marks & Spencer and British Airways. These companies are mainly focused on maintaining employee satisfaction through best practice, such as being responsive to employees' concerns and training. Hence, it may be possible that the different levels of organisational effectiveness that each company attains may be associated with the strategies applied in the companies together with the level of satisfactions and skills of their employees and the specific strategy (i.e. cost vs. quality) that those companies have applied.

Similarly, Afiouni (2007) said that the manager should contribute an appropriate strategy for human resource management, encourage employees to share knowledge, assist group interaction and facilitate the organisation to store knowledge in the system, routines, processes and cultures which in turn drive organisational effectiveness. Human resource management also maintains the employees' satisfaction which helps to build up the organisational learning. Torrington et al., (2005) and Gail and Russell (2001) propose many human resource systems which are useful to support organisational learning: contribution and job description, training and development, motivation and

rewards, collaboration, and benefit. Further, the findings of recent research also show that human resources play a vital role in creating a learning environment. In particular, training and development have been shown to be the most widely used method of knowledge transfer (Kersley et al., 2005; Szarka et al., 2004). Recently, researchers investigated the training programmes that 448 family businesses and 470 non-family businesses offered their employees. The findings show that training programmes are significantly important for both types of firms, but at different stages in their growth (Kotey and Folker, 2007).

Thus, organisational members contributing to sharing knowledge within the organisation will facilitate the organisational learning process. Of the organisation then acquire new knowledge through experience. Thus, the manager can play a key role in sharing and transferring knowledge through appropriate human resource management methods improving employees' skills and routines.

### **3. Overview of Literature on Organisational Effectiveness**

#### **3.1 Definition of Organisational Effectiveness**

For decades, the term “organisational effectiveness” has been defined from a wide range of perspectives, and some researchers see it as multi-dimensional (Grunburg, 2004; Lumpkin and Dess, 1996). They have proposed that each firm has particular criteria for organisational effectiveness, and the criteria which are

appropriate in one firm may not be suitable in others. The organisational effectiveness factors identified in specific cases are closely connected to individual local cases and purposes. So, it is necessary for the key components of organisational effectiveness to be suitably categorised (Grunburg, 2004). Nevertheless, scholars have endeavoured to develop a definition of organisational effectiveness and to acquire criteria that are applicable across organisations and can be meaningfully placed within a general theoretical structure. Traditional analysts assert that the organisational effectiveness for small business ventures embraces explanations of why people start their ventures, what problems business ownership overcomes and generates for the owners or managers, and specifically what the firm's managers actually desire to achieve for themselves (Beaver and Jennings, 2001; Chaganti and Chaganti, 1983; Hornaday and Wheatley, 1986; Kelmar, 1990; Storey et al, 1987; Thorpe, 1989).

Recently, researchers have come to emphasise that understanding organisational effectiveness can help to identify ways of improving the performance of the organisation (Halachimi, 2002). Academic researchers have described organisational effectiveness as an umbrella term for all concepts that consider the success of a company and its activities. Different areas of business strive for particular business goals, so the term of organisational effectiveness for each company may vary depending on the desired goals. Organisational effectiveness could be defined as the ability to reach a desired objective or the degree to which desired results are achieved (Stefan, 2005). It could also be defined multi-

dimensionally by looking at four different categories: achieving organisational goals, increasing resourcefulness, satisfying customers, and improving internal processes (Cameron, 1980). Organisational effectiveness also serves the purpose of monitoring performance, identifying the areas that require attention, enhancing motivation, improving communications and strengthening accountability (Waggoner et al. 1999). Amaratunga and Baldry (2002) defined organisational effectiveness as a concept to help an organisation to set agreed-upon goals, allocate and prioritise resources, inform managers to either confirm or change policy or programme directions to meet those goals, and share results of performance in pursuing those goals.

Finally, organisational effectiveness can refer to the level of productivity that the organisation can achieve towards attaining organisational goals, increasing organisational resources, meeting customers' needs, and improving internal processes.

### **3.2 The Concept of Organisational Effectiveness**

Scholars have proposed that the organisation's resources are the source of sustainable competitive advantage to support a firm in achieving superior performance (Dierickx and Cool, 1989). These resources must be rare, valuable, without substitutes, and difficult to imitate (Barney, 1991; Guest et al., 2003; Markides and Williamson, 1996). In order to sustain organisational competitiveness and success, organisational learning concepts have been offered

to facilitate and enhance levels of productivity (Dunphy et al., 1997; Ghobadian and O'Regan, 2006; Nicholas, 2005). At the same time, evidence shows that organisational effectiveness is used to determine organisational learning in different areas (see, for example, Murray, 2003; Panayides, 2007; Pemberton and Stonehouse, 2000; Spicer and Sadler-Smith, 2006; Szarka et al., 2004; Vakola and Rezgui, 2000; Vincent and Ross, 2001). Likewise, various means of determining organisational effectiveness have been applied to help continue learning in the organisation (see, for example, Afiouni, 2007; Aragon-Correa et al. 2007; Chang and Lee, 2007; Michie and Sheehan-Quinn, 2001).

In addition, researchers generally view organisational effectiveness by two main measures: objective and subjective. For example, “some studies use objective measures of company performance, such as productivity, profit, or return on assets, typically taken from externally recorded and audited accounts; many rely on subjective measures as reported by respondents” (Wall et al., 2004, p. 96).

Several studies have considered the relationship between different perspectives of management concepts and organisational effectiveness collected in the form of objective measures. For example, Tower et al. (2007) studied the relationship in the small business sector between family business and organisational effectiveness, focusing on financial performance. A sample of 241 small firms was surveyed. There were significant differences in the planning processes between businesses that held family meetings and those that did not. No differences were found in the performance measures. Significant relationships

between family meetings and both planning processes and performance measures were found. In addition, Carlson et al. (2006) studied a sample of 168 family-owned fast-growth small and medium enterprises to empirically examine the consequences of five human resource practices on sales growth performance. They found that training and development, a recruitment package, maintaining morale, use of performance appraisals, and competitive compensation were more important for high sales-growth performing firms than for low sales-growth performing firms.

Zahra and Covin (1993) studied the relationships among organisational strategy, technology policy, and firms' performance. 103 manufacturing firms were investigated. They found that organisational strategy moderates the relationship between technology policy and a firm's performance. They recommended that it is important for a firm to align organisational strategy and technological policy as a prerequisite for better performance.

Furthermore, Pett and Wolff (2007) studied the relationship between product improvement and organisational effectiveness based on the growth of the firm as one dimension and profitability as another. Their sample of 855 small and medium-sized manufacturing firms was randomly selected. They found that the product improvement orientation is positively associated with growth and financial performance, which is profitability, but the process improvement orientation showed no statistical relationship to growth and ultimately profitability.

Subjective measures are an alternative approach to measuring organisational effectiveness (Garg et al., 2003). Subjective measures of organisational effectiveness are cost effective because organisational effectiveness data can be collected through questionnaires or interview surveys that simultaneously obtain information on practices. Especially in the smaller enterprises, there are few appreciable financial records, and even for the organisations which do keep such records, the data may not be held in an appropriate form compatible with the required level of analysis. In general, the subjective measures are likely to ask respondents to evaluate their company's performance compared with their competitors (Wall et al., 2004). In particular, subjective measures have been widely used to measure the organisational effectiveness in the service sector (Patton et al., 2000; Sahay, 2005; Way, 2002).

For instance, Johnson and Gubbins (1992) proposed a study of the relationship between human resource management and organisational effectiveness. They found that there is a correlation between training and organisational effectiveness, and proposed that associating training with business policy assists in maintaining competitiveness. In addition, Variyam and Kraybill (1993) found that management education led to greater use of planning and technology but they could not quantify whether this led directly to any actual impact on organisational effectiveness of the firm. Further, recent research has studied the relationship between organisational effectiveness and organisational learning. A sample of 197 managers was studied, and the data collected by a self-reported questionnaire. The findings show that there is a statistically significant

correlation between organisational learning and organisational effectiveness. The companies which invest effort into the systematic approach to organisational learning profit in terms of an augmented level of employee trust in the leadership, improved efficiency of work organisation, a more committed workforce, decreased costs of work per employee, increased employee satisfaction and increased employee flexibility (Skerlavaj and Dimovski, 2006).

In summary, organisational effectiveness can be measured objectively and subjectively. Objective measures rely on the complete record of the company data whilst the subjective measures tend to ask the respondents to appraise their organisational effectiveness vis-à-vis their competitors. Organisational effectiveness is necessary for organisation which desires to improve itself. Hence, organisational effectiveness can be considered by focusing on different dimensions of organisations, according to the purpose of each organisation.

### **3.3 The Importance of Organisational Effectiveness**

The nature of small business means that the manager plays a vital role in determining the creation and development of the organisation; however, the relentless drive for personal achievement may reduce growth potential and ultimately may threaten the survival of the small firm (Bellás, 2004). The manager is the key person in the small firm, who defines the organisational goals and in turn drives the level of success in the organisation. In order to accomplish

the organisational goals, the manager needs to understand and explain the organisational effectiveness, which could then help in steering the organisation to accomplish the goals. Several researchers have suggested approaches to improving the organisation, through good management to accomplish effectiveness, so understanding organisational effectiveness could enable the manager to run the company more effectively at different level.

Moreover, Pett and Wolff (2007) recommended that businesses in the same environment but of different sizes may produce different levels of organisational effectiveness. Several researchers have included firm size or number of employees to study their relationship with organisational effectiveness. The results suggest that the number of employees has both a negative and a positive correlation with organisational effectiveness (see, Arocena et al., 2007; Maes et al., 2005; Miller and Cardinal, 1994; Torsten et al., 2008; Waldman et al., 2001; Yu-Ching et al., 2006; Zahra et al., 2007). Meanwhile, Collins-Dodd et al. (2004) investigated the relationship between gender and financial performance from 160 small accounting practices. The findings suggest that although financial performance appears to be significantly different for female- and male-owned organisations, these performance differences are explained by several variables other than gender directly.

Similarly, Wiersema and Bantel (1992) studied the relationship between demographics of managers and organisational effectiveness in US industries. They found a significant correlation between the demographics of managers and

corporate strategic change, in turn improving organisational effectiveness. They found that younger managers with less experience and higher levels of education contribute to generating higher levels of performance. Similarly, Coleman (2007) studied the relationship between the demographics of managers and organisational effectiveness among US retailers. The results indicated that education and experience are significantly correlated with organisational effectiveness. She also found that gender is not significantly correlated with organisational effectiveness.

Bernice and Cathleen (2007) supposed that education, type of employment or industry, and other types of experience help to prepare managers for the challenges of business competition and to transfer their knowledge, skill and experience to employees; these are related to organisational effectiveness. Shrader and Siegel (2007) studied the relationship between key attributes of managers and organisational effectiveness. They applied longitudinal studies to investigate 198 high tech firms. They found that characteristics are significantly related to organisational effectiveness. In particular, technical experience has a direct association with a firm's performance. So, it appears that the manager of the small firm is the one who is most appropriate to evaluate the organisational effectiveness of that firm.

Furthermore, Skaggs and Youndt (2004) used organisational effectiveness to explain human resource management. They proposed that, although organisational effectiveness and human resource management are not

significantly correlated, human resource activities are the significant factor which helps to increase employees' knowledge and skills, facilitate group interaction and knowledge sharing, and enable the organisation to store knowledge in systems, routines, process and cultures which, in turn, improve organisational effectiveness. Similarly, Sels et al. (2006) attempted to develop and test a conceptual framework linking human resource management to organisational effectiveness, concentrating on financial performance. They studied whether the development of human resource management is beneficial for small and medium-size companies. The results suggest that human resource management impacts on organisational effectiveness. Furnham et al. (1999) studied the way to improve organisational effectiveness based on the perceptions of managers. They applied organisational effectiveness to classify effective learning styles. 203 employees of a telephone company participated in survey, and multiple regression statistical tests were applied to analyse the data. They found that Reflector and Pragmatist learning styles were statistically significant predictors of organisational effectiveness.

Another approach has been to study whether organisational effectiveness is influenced by different leadership styles. Researchers suggest that diversity in senior management will help firms to effectively align business strategies with current and future demographic and market trends to achieve organisational growth and profitability (Quinetta and Park, 2007). Milliken and Martins (1996) highlight a link between diversity in leadership and organisational effectiveness. Similarly, O'Regan and Ghobadian (2004) empirically examined the relationship

between strategy, leadership and organisational effectiveness. Their sample study of 194 firms outlines the association between strategy characteristics and the dimensions of leadership in a ranked order according to their degree of importance. The findings show that a balanced transformational and transactional leadership style is likely to lead to better performance. The study also found that firms strongly emphasising any of the leadership styles performed better than firms with uncertain or weak leadership styles.

Hodges and Kent (2006) studied the relationship between planning sophistication and organisational effectiveness. This research takes a different approach by using a one-on-one interview technique with closed questions to evaluate management perceptions of planning sophistication and its relationship to perceptions of organisational effectiveness. The results show that managers' perceptions of greater sophistication in their planning efforts are slightly positively related to perceptions of better organisational effectiveness. They emphasised that increased knowledge would have some impact on a firm's future organisational effectiveness.

Finally, organisational effectiveness is the key factor in helping managers understand how to develop their firms to accomplish the organisational goals, from the perspective of diverse demographics, human resource management, learning styles, leadership styles, and business strategy, in order to identify how to improve business performance.

### **3.4 The Process of Organisational Effectiveness**

Different approaches have been applied to encourage learning and increase organisational effectiveness, such as sharing knowledge and improving communication among employees. Nevertheless, in the concept of organisational learning, scholars seek to show how knowledge can improve organisational performance. They highlight that the organisation should create a learning environment to encourage members to continue to learn. In pursuit of the development of learning in the organisation, Clarke (1999) proposed that the capability of the manager to support members of the organisation should not be underestimated, including encouragement of appropriate learning in a way which is productive corporately and individually (Mabey, 2002). Correspondingly, Beaver and Jennings (2001) suggested that the manager in the small firm is in the key person who make the learning environment happen. In each small firm, the manager may have varied perspectives, so the goals will be at different levels.

Ghobadian and O'Regan (2006) agree that managers are considered to be the most appropriate respondents because normally they have primary responsibility for setting strategic directions and plans for the organisation, and responsibility for guiding actions that will realise those plans (Gioia and Chittipeddi, 1991, p. 434; Westphal and Frederickson, 2001). Hence, considering managers' perceptions is necessary in measuring organisational effectiveness. To elaborate, Pelham and Lieb (2004) proposed that the manager of a small firm greatly influences organisational effectiveness: a strong position in a small business can

influence organisational sense-making among other members and therefore impact overall effectiveness. Thus, the small business manager ultimately influences organisational behaviour through organisational effectiveness (Coffey and Atkinson, 1996; Miguel et al., 2004; Payne et al., 2005).

In addition, Grunburg (2004) and Wall et al. (2004) suggested that subjective and objective measures are important factors in measuring organisational effectiveness, dependent on the goals of each organisation. Laitinen (2002, p. 65) proposed that a well organised system of performance measurement may be the single most powerful mechanism at management's disposal to enhance the probability of successful strategy implementation. Measuring organisational effectiveness objectively and subjectively could help to present the level of organisational value. Objective measures can be considered in different categories, such as profit, sale volume, market share, return on investment (Bryan, 2006; Davis and Daley, 2008; Ellinger et al., 2002; Michie and Sheehan, 2003) whereas subjective measures can also be measured in different ways from the perceptions of managers (Garg et al., 2003; Laitinen, 2002; Mabey, 2002; Pelham and Lieb, 2004; Wall et al., 2004).

Furthermore, both measures of organisational effectiveness, subjective and objective, have been applied to discover how to develop the level of productivity of the firm, dependent on constraints and the purposes of the studies. Studies have applied objective measures to evaluate the level of success of the firm in different research disciplines. For example, Johnsen and McMahon (2005)

studied the relationship between gender of managers and organisational effectiveness in small firms in Australia. They applied objective measures, financial performance (Return on Equity and Return on total Assets) and businesses growth (Employment Growth, Sales Growth and Asset Growth) to determine the organisational effectiveness. This longitudinal study applied logistic regression to examine the data. They found that there are no statistically significant differences between gender and either financial performance or business growth.

Sadler-Smith et al. (2003) considered the connection between managerial behaviour, entrepreneurial style and organisational effectiveness considered as sales growth. 156 completed questionnaires were analysed by logistic regression. Results indicated that entrepreneurial style has a positive significant correlation with firms which have high sales growth. However, managerial behaviour did not have a significant correlation with sales growth.

In addition, De Hoogh et al. (2004) studied small and medium enterprises in the Netherlands, examining the relationship between leadership and organisational effectiveness; they focused on the objective measure of financial performance, comprising profitability, liquidity and solvency. Different statistical tests, i.e. T-Test, Correlation and Hierarchical Multiple Regression, were used to analyse the data. They found that leadership is positively related to profitability but unrelated to liquidity and solvency. Next, Carlson et al. (2006) investigated the connection between human resource management activities and organisational effectiveness,

focusing on the objective measure of sales growth. 168 managers of small firms completed the questionnaires. Logistic regression was used to analyse the data. They found that HRM activities do in fact have a positive impact on performance. The results show that high performing firms placed significantly greater importance on HRM activities than did low performing firms.

In contrast, subjective measures have been applied in different areas of research to study the level of productivity of the organisation. For example, Swinney et al. (2006) considered the association between managers' levels of education, gender and organisational effectiveness and focused on subjective measures obtained from managers' perception. 267 managers from the service and retail industries in the United States were asked to evaluate their organisational effectiveness relative to the previous year, to other similar business in their community and to the overall industry. The ANOVA statistical test was used to scrutinise the data. Results indicated that level of education and the gender of the managers interact to have an impact on organisational effectiveness.

In addition, Wang and Ang (2004) applied subjective or self-reported measures in three dimensions: growth in market share, growth in cash flow, and growth in sales, to investigate how to develop firms' performance. Questionnaires were distributed to local firms in Singapore. Different statistical tests were employed to analyse the data. They found that there is a significant correlation between environment, resource-based capabilities, strategy, and venture capital in a firm's involvement and performance.

Similarly, Ardichvili (2001) studied the relationship between leadership styles of entrepreneurs and managers in three large manufacturing companies in Russia. The subjective measures were used as an instrument to determine the performance of the entrepreneurs and managers. The three subjective measures were satisfaction (satisfaction with the managers' leadership styles), extra effort (the extent to which managers were able to elevate employees' motivation beyond their initial expectations), and effectiveness (effectiveness in meeting employees' needs). The leadership styles were measured using the leadership style questionnaire developed by Avolio and colleagues (Avolio et al., 1995). Different statistical tests such as correlation and multiple regression were applied. Results indicated that there is a significant difference between entrepreneurs and managers in all three leadership styles (Transformational, Transactional, and Laissez-faire leadership) and subjective measures.

Tsai (2006) studied the relationship between human resource management practices and organisational effectiveness using subjective measures in Taiwan's semiconductor design industry. The subjective measures of organisational effectiveness were divided into two sections, financial performance and non-financial performance. The former includes market share, sales growth, profitability; and the latter includes the quality of the product or service, the development of a new product or service, and customer satisfaction. Results indicated that the effective use of employee empowerment practices is positively correlated with organisational effectiveness.

In addition, founded on different recent research related to the measurement of organisational effectiveness of retail firms, financial performance has been widely used to measure effectiveness. Profitability is a primary measure of the overall success of a company, as the basic goal of most businesses is to create profit (Walton and Aerts, 2006). The growth in revenues has also been widely used as an indicator to measure overall organisational effectiveness (Arie, 2005; Bernice and Cathleen, 2007; Orser et al., 2000). In addition, Becker and Gerhart (1996) recommended that the appropriateness of performance measures varies with the level of analysis, but in any case the focus should be on measures having inherent meaning for a particular research setting.

Similarly, Wall et al. (2004) suggest that it is valid to use different aspects of subjective data; however, researchers need to take care in data collection. Generally, financial records are confidential and most firms are unwilling to provide these kind of data, so some researchers have asked respondents to rate the performance of their organisation by using a rating scale which compares them with other competitors in their business sector (Love et al., 2002; Pett and Wolff, 2007; Wiklund and Shepherd, 2005). In support of the previous concept, Oliver (1997) suggests that organisational effectiveness can be typically evaluated on a rating scale whereas importance can be either rated by the respondents or estimated on the basis of performance. Similarly, research to date has used both objective and subjective indicators, the results showing that both approaches have been highly correlated or equal (see, for example, Dess and

Robinson, 1984; Garg et al., 2003; Guest et al., 2003; Jennings and Young, 1990; Wall et al., 2004).

However, one may question whether the self-reported measures may be biased for measuring organisational effectiveness. Yeung and Berman highlighted that 'a weak measure on the right issue is better than a strong measure on the wrong issue' (Yeung and Berman, 1997). Nevertheless, the literature suggests that responses on performance achievements are reliable (Nayyar, 1992; Tan and Litschert, 1994). Hence, it appears that to understand the organisational effectiveness of each firm, gathering data using a rating scale from the manager is also an effective form of measurement.

In conclusion, organisational effectiveness can be measured on a variety of dimensions and no single measurement completely describes all aspects of effectiveness. In line with Walton and Aerts (2006), financial performance is an appropriate way to measure the basic overall performance of each firm against others within the same business area. Due to the nature of small business, the manager plays a vital role in determining the creation and development of the organisation (Bellas, 2004). Also, as suggested by Oliver (1997) organisational effectiveness can be typically evaluated on a rating scale whereas importance can be either rated by the respondents or estimated on the basis of performance. It appears that to understand the organisational effectiveness of each firm, gathering data by using a rating scale from the manager is also an effective form of measurement. Therefore, in this study, the managers of each firm have been

asked to evaluate their financial performance compared with other firms in their sector.

#### **4. The link between Organisational Learning and Organisational Effectiveness**

In this globalisation era, improving a company's capability is indispensable in business sector. Becker (1964) suggested that the basic premise of human capital theory implies that the productive capability of employees can be improved by investing in their knowledge, skills and abilities. Inimitable resources may then help an organisation to obtain such competitive advantage (Barney, 1991). Jones (2000) emphasised that managers who attempt to enhance employees' capabilities to better understand and manage the organisation and its environment, and to accept decisions may help their organisation to increase organisational effectiveness on a continuous basis. Barney (1991) and Lengnick-Hall et al. (2009) proposed that RBV could help firms in making the best use of resources, and SHRM can help in enhancing employees' skills, and consequently increasing productivity. Logically, the careful development of managers may have a positive influence on organisational effectiveness (Mabey and Ramirez, 2005).

In particular, in the small firm, the manager is the key person responsible for decision-making, contributing to, and encouraging learning in the workplace.

This requires a move from simply putting more knowledge into databases to developing the different approaches that knowledge can bring into an organisation and its impact on organisational effectiveness (Cavaleri, 2004; Cross and Baird, 2000). Recent researchers also suggest that the key contributors to driving organisational success need to concentrate their effort in terms of transferring experience, skills and knowledge to their employees; in turn, the final results could be measured in the form of organisational effectiveness (Banfield et al., 1996; Coleman, 2007). They recommended that in this modern era in which employees act more like free agents, while organisations are in constant flux of downsizing and restructuring, the manager should encourage the learning environment within the organisation to enhance employee commitment, which will serve as a tool of competitive advantage and lead to improved organisational effectiveness. Accordingly, the manager is the key person between these two concepts of the organisational learning and organisational effectiveness.

In conclusion, since organisational learning may be helpful to the company through increasing the skills of employees to serve customers' needs, so it would be advantageous for a firm to encourage organisational members to share knowledge at different levels to enhance the skills of employees which is difficult to imitate. Improving the performance of the firm therefore requires understanding the different levels of organisational effectiveness. To accomplish these linkages, the manager of the small firm may be the key person in encouraging employees to learn through the HR practices, which in turn leads to

increased customer satisfaction, and to the company achieving superior organisational effectiveness.

## **5. Overview of Literature on Learning Style**

### **5.1 Definition of Learning Style**

Scholars comment on the difficulties associated with the conceptual construct of the learning style, which deals with hidden processes that occur inside the brain. These processes can only be inferred, so they cannot be classified through observation (Browne, 1986). Emmanuel and Potter (1992) said that there are no definitions of learning styles anywhere in the literature, but Gardner (1996) argued that there are too many, so many that the definitions are “as varied as the individual dealing with the concept”. Duff (2004a) claimed that learning style is the combination of characteristic cognitive, affective, and psychological aspects that acts as an indicator of how an individual interacts with and responds to the learning environment. Bryans and Mavin (2003) asserted that learning style is defined as something that take place in the head of an individual and could be observed through consequential changes in behaviour, and Given (2002) defined learning style as the way people choose, incorporate and process new information.

Further, Sadler-Smith (2001) asserted that learning style, in the way a person perceives, collects, and processes information, is reflected in the attitudes and behaviours that influence their preferred way of learning. A person's learning style influences their social interactions as it affects the way they learn, teach, work, perform, and resolve problems. Fleming (2001) also defined learning style as an individual's preferred ways of gathering, organising, and thinking about information. Also, a learning style can be defined as a fundamental process by which a person's attitudes and behaviours influence the preferred method of learning (Brown, 1996). Hayes and Allinson (1996) claimed that learning style is a subset of cognitive style. Honey and Mumford (1992) explained that learning style is the key to understanding the different preferences of learning or the preferred attitudes and behaviours towards learning. Cornwell et al. (1991) suggested that learning style can be defined as a technique to notify people about how they learn best. Further, Dunn (1991) defined learning style as the way in which individuals begin to concentrate on, process, internalise, and retain new and difficult information. Kolb (1984) asserted that learning styles are categories developed by educational researchers to classify learners based on their customary approach to perceiving and processing information.

Finally, learning style could be defined as the way people process information effectively in their own manner. It also plays a vital role in helping people to understand and identify their own learning style and adapt it to suit their organisational surroundings; in turn, they could transfer and encourage the knowledge to others more effectively.

## 5.2 The Concept of Learning Style

Patterson et al. (1997) suggested that “if managers wish to influence the performance of their companies, the most important area to underline is the management of people” (Patterson et al., 1997, p. 21). Although organisational learning is distinct from individual learning, they are closely linked. Organisations can learn separately from any particular individual, but individual members need to share formal and informal processes and structures through which learning can be undertaken and then diffused and transferred between the individual and groups (Lundberg, 1995). Kolb (1984) identified learning which occurs in the organisation in terms of the cognitive viewpoint, that “individual learning is dependent on the learning arrangements that exist within the organisation, either accelerating or slowing the learning process” (Pemberton and Stonehouse, 2000, p. 187). Michie and Oughton (2001) recommended that if organisational members have a stake in the organisation in which they work, they will be more motivated and committed, with positive outcomes in terms of productivity and organisational effectiveness.

Also, Salaman and Butler, (1994, p. 36) recommended that learning style of the manager may be affected by work experience. Mumford (1994, p. 77) proposed that “the organisational learning depends absolutely on the skills, approaches and commitment of individuals of their own learning”. It appears that whilst people become part of an organisation, their learning styles do not only influence

development at the individual level but also involve development at different levels in the organisation, to generate organisational effectiveness.

To enhance organisational effectiveness through organisational learning, the manager may consider to create conditions appropriate for learning to take place, which require the characteristic or style of learning to nurture the knowledge to be diffused and transferred (Kimberly, 1979; Meyers, 1990). Learning style is the composite of characteristic cognitive, affective, and psychological factors that serve as an indicator of how an individual interacts with and responds to the learning environment. The study of learning style involves the investigation of individual differences: people perceive and gain knowledge differently, and they shape, reflect, and perform differently (Jung, 1921; Myers & Briggs, 1962).

In addition, the study of Furnham and colleagues found that there was overlap between learning style and personality. They also suggested that learning style is a subset of personality but needs to be measured independently. Personality measures do predict job performance, but only when validity coefficients are summarised according to constructs from personality taxonomy. It appears that when both predictor and criterion domains are considered, specific personality constructs can predict a group of targeted performance criteria such as effort and leadership, personal discipline, counter-productive behaviour, creativity, sales effectiveness, educational success, training success and combat effectiveness (Hough, 1998). It is clear that learning style is a subset of the personality which predicts crucial components driving the success to the business; as well as

playing a vital role in assisting managers to understand how they could diagnose learning style.

Furthermore, Thomas and Amit (2007) posited that faculty who are consciously aware of their students' learning styles, as well as their own, are in the position to make more informed choices about how to create effective learning in their courses. Southworth (2002) suggested that the behaviour of the teacher in the classroom could increase students' academic performance. Also, Boyle (2005) posited that in terms of learning style, people are as diverse in the workplace as they are in the classroom. Similarly in organisations, to continue the development of learning, managers could take the advantage of learning style, so they need to be equipped with the knowledge of how learning best take place, and the skill of knowing how to learn to create an effective learning environment in their organisations.

In addition, Trautmann et al. (2006) studied the relationship between learning styles and leadership styles in the non-profit organisation. 148 samples were collected from the Bayer Centre for Nonprofit Management at Robert Morris University in Pittsburgh, Pennsylvania, USA. They found that there is a significant connection between learning styles and leadership styles of the managers. They suggested that the active use of a variety of strategies for learning from experience has a significant, positive relationship with transformational leadership. They also confirmed that this link has implications for the design of leadership development programs, signifying that future

managers may need to widen a broad range of learning strategies and become practiced in relating them supply. They also recommended that one should have opportunities to reflect on and learn from their own experiences in leadership, be encouraged to utilise a variety of approaches in learning from them.

Lastly, learning style serves as an indicator and predictor to measure interaction, or people respond in different learning environments. In addition, learning style is intimately connected to the organisational learning concept to assist managers to develop and transfer their knowledge.

### **5.3 The Importance of Learning Style**

Sloman and Webster (2005) emphasised that the way people learn is changing. Duff and Duffy (2002) and Kidd and Kanda (2000) supposed that, partly because of the nature of today's organisations and partly because of individual preferences, learning has become more important; the role of workplace learning and performance requires professionals to change. Learning style is widely accepted in the field of management and education. Mumford (1994, p. 79) asserted that learning cycle and learning style instruments can be used to assist the individual learner to identify and make better use of any kind of learning experience – designed or accidental. Brown (1996) also asserted that when people can identify their learning style, they will better understand their learning process, make learning more pleasurable and give themselves the opportunity to

learn more effectively. Once a person determines their learning style, they are able to recognise how to access their improved knowledge. So, learning style plays a vital role in helping people understand their own preferences, and identify the approach through which they can learn best.

As suggested by Hofstede (2001, p. 29), power distance refers to the “different solutions to the basic problem of human inequality”. Hofstede (1980) earlier said that inequality is normally associated with the weights and status that societies put on matters such as prestige, wealth and power. In terms of organisations, inequality in power is inevitable and functional and is usually manifested in hierarchical (employees and managers) relations. Power distance is concerned with who decides what in organisations and how decisions are made. This shows that the manager is the person who is likely to manipulate activities related to the organisation. In organisations, the managers’ backgrounds are diverse, so they have a variety of approaches to managing the organisation. By encouraging a learning environment, the manager may be the key person to transfer knowledge among employees. Thus, refining the learning style is expected to build up sustainable competence (Kidd and Kanda, 2000). It plays a vital role in helping managers to identify their own learning style and to enable them to reach the objective of creating a learning environment in the workplace. Also, learning style helps managers to increase their own learning processes and skills, opening the opportunity to improved performance and personal development (Gilbert et al., 2008). Learning style also make it easier for the manager to know how to

attain the skills or knowledge involved in their everyday responsibilities (McGuire, 2001).

Finally, just as managers have diverse backgrounds and different ways of learning, so, it is important that they understand preferences for particular ways of learning. Once they understand their own learning preference, they will be able to apply this experience in their routine duties, and will be able to learn and transfer their knowledge more efficiently and effectively; in turn. This will encourage learning throughout the organisation and enhance overall organisational effectiveness.

#### **5.4 The Process of Learning Style**

Learning styles have been developed by scholars for a variety of purposes, under different names and from perspectives based on their own fields of research (see, for example, Dunn, 1990; Fleming, 2001; Honey and Mumford, 1995b; Kolb, 1976; Witkin et al., 2002). There are several well known learning style concepts applied in academic research, such as the Myers-Briggs Type Indicator (MBTI), Kolb's learning style, Honey and Mumford's learning style, Gregorc's learning style, the Felder-Silverman learning style, the VARK model, and the Dunn and Dunn learning style (Hawk and Shah, 2007; Towler and Dipboye, 2003). In this thesis, two main categories of learning style, psychological (MBTI) and behavioural concepts (Kolb's learning style, Honey and Mumford's learning style) are reviewed to highlight the relationship with the research objectives of

this thesis. The successful use of learning styles in educational research has attracted the notice of organisational trainers aiming to stimulate the design and delivery of instruction for millions of employees each year (Buch and Bartley, 2002).

#### **5.4.1 The Myers-Briggs Type Indicator**

Based on Jung's theory of psychological types, the Myers-Briggs Type Indicator (Myers, 1979) assesses an individual's preferred way of interacting with the environment. This theory proposed a typology differentiating individuals in terms of their personality (extroversion and introversion), the way in which they perceive the world (intuition and sensing), the process by which they judge (thinking and feeling), and the process by which they obtain and evaluate information (judging and perception) (Grigorenko, 1995). This concept mainly helps individuals to understand their own personalities and preferences. For example, Douglass and Douglass (1993) found that couples who have similar types (those having three or four common preferences) will have fewer marital problems than couples having opposite types. This would lead organisational members to understand their own preferences and collaborate in the workplace.

However, even though it may be useful to apply this concept to guide development (DeVillis, 1991), it may also yield measures that overlook important parts of learning style differences that occur in actual learning situations. Plus, it could be criticised that this indicator is strongly related to the

psychological type which is not intended to classify the learning styles of people when compared to the other instruments. In addition, because of its complexity, the Myers-Briggs Type Indicator tends to cause confusion (Sugarman, 1985).

#### **5.4.2 Dunn and Dunn's learning style**

The other concept of learning style falling into the group of psychological types is Dunn and Dunn's learning style, as measured by the Productivity Environmental Preference Survey or PEPS (Dunn and Dunn, 1975, 1989). Dunn and Dunn (2000) identified five learning style stimuli and several components within each stimulus. The five stimuli and their relevant elements are Environmental (sound, light, temperature, and room design), Emotional (motivation, persistence, responsibility, and structure), Sociological (learning alone, in a pair, with peers, with a teacher, and mixed), Physiological (perceptual, intake while learning, chronological energy pattern, and mobility needs), and Psychological Processing (global or analytic, hemisphericity, and impulsive or reflective). Compared with other approaches, the Dunn and Dunn learning style includes greater comprehensiveness, is more extensive, and demonstrates higher levels of consistent effectiveness (Given, 1997-1998, p. 10).

In addition, unlike other learning style concepts, Dunn and Dunn (1990) proposed that this learning style is mainly focused on the way in which people begin to concentrate on, process, internalise, and retain new and difficult information; the purpose of this concept is also to assist teachers to use learning

styles as a keystone of their instruction, while students can use to capitalise on their learning style strengths when they concentrate on new and difficult information (Schiering and Dunn, 2001). Hawk and Shah (2007) proposed that Dunn and Dunn's learning style is acceptable in terms of validity and reliability; however, the main purpose of this concept is largely for classifying the learning styles of elementary and secondary school students. So, it appears that this concept is mainly related to educational research.

#### **5.4.3 Kolb's learning style**

David Kolb developed learning as a four-stage process that includes “concrete experience (feeling), reflective observation (watching), abstract conceptualisation (thinking), and active experimentation (doing)” (Heffeler, 2001; Sara and Michael, 2007; Thomas and Amit, 2007; Webb, 2006). Kolb and Smith (1996) asserted that people learn through their experience and the role of experience is important in shaping the process of learning. This is also consistent with the study of Kouzes and Posner (1995), suggesting that role experience is strongly related to the way managers learn how to lead.

In addition, Mezirow (1994, p. 222-223) defines learning as “the social process of construing and appropriating a new or revised interpretation of meaning of one's experience as a guide to action.” Posner (2009) also proposed that people learn from their experience, however formal or informal, structured or naturally occurring. He examined the relationship between learning styles and leadership

styles, and explored how these various learning styles might relate to how respondents actually behave as leaders. He found that there is an association between those two variables. He also suggested that leadership development is a learning process in itself. So, he recommended that the implications of his research would be: first, learning style would be able to help managers to apply strategies to make better choices about putting themselves into situations where they can learn the most. Second, because learning occurs through a variety of modalities, any effort to develop leadership skills would benefit from designs that access more than one learning style or modality. Third, working with personal (cognitive) reflection activities may be the key to developing inspiring and shared vision leadership behaviours.

Kolb (1984) is founded on how experiences are interpreted into concepts that provide direction during new experiences. He also explained that the learning cycle can start at any stage. Each stage explains how people develop information, and he (Kolb, 1976) identified four types of learner based on the learning cycle. *Divergers* most easily learn through concrete experience and reflective observation. They are comparatively imaginative, and prefer to apply their experience to identify the problem and potential solution.

In addition, divergers are good at generating new perspectives by reflecting on their former experience. *Assmilators* are likely to learn through reflective observation and abstract conceptualisation. They are good at planning, creating and defining, and they can develop complicated plans, but they are not practical.

*Convergers'* strength lies in applying practical ideas, and they focus within their specialist domain on specific problems. They must be grounded in abstract conceptualisation and then actively experiment. They are good at designing things, making decisions and evaluating plans, but they are likely to conclude problems too rapidly, leading them to solve the wrong problem. *Accommodators* learn most readily by expanding upon active experimentation with concrete experience. They become accustomed to immediate circumstances and are instinctive. They are willing to try new activities through a trial and error approach, strive for accomplishment and enjoy putting plans into action. If the plan does not fit the facts, they will leave the plan and continue to complete the task (Duff and Duffy, 2002; Frido, 2004; Kolb, 1976).

In addition, Kolb and Smith (1996) proposed the last two stages of learning cycles, which are abstract conceptualisation (thinking) and active experimentation (doing), are related to the situation of the manager in the organisation faced with a myriad new challenges and information; the manager must begin utilising learning skills contained within all four stages of the learning cycles. This idea provides a significant connection in the need to investigate the relationship between learning styles and leadership styles; in particular, when managers deal with complex situations and information which requires them to make crucial decisions.

However, there are several potential problems with Learning Style Inventory (LSI) such as redundancy between learning style orientation and personality

(Jackson & Lawty-Jones, 1996). The items used in previous measurements tend to ask for self-report of general and behavioural patterns rather than focusing specifically on the learning situation. Also, Cornwell and Manfredi (1994) criticised LSI's use of force-ranking scoring because it contains no information about the relative differences among individuals on the four scales. Rather, the measure only rank orders the learning styles for a single person. Factor analyses on LSI have consistently demonstrated a two-factor bipolar dimension that runs from thinking to doing and from feeling to watching (Cornwell et al., 1991; Geiger et al., 1993).

Moreover, although Kolb's learning style inventory has been criticised for contradictory and inconsistent findings (see, for example, Allinson and Hayes, 1990; Duff, 2004b; Loo, 1996; 1999), a variety of researchers in different disciplines have applied his learning style to increase productivity and encourage learning in organisations.

Frido (2004) applied Kolb's learning cycle to study the differences of behaviour between the members of new product development and production groups. This empirical study gathered data from two companies, one producing consumer electronics and the other high-end lighting products. In each company, eight people were interviewed, and four people selected from each team. They found that different learning styles are crucial to different stages of new product development and production. However, conflicts could arise between the two teams because of members' different learning styles, and the researchers

suggested that employees should be able to adjust from one learning style to another, depending on the situation, in order to work more effectively.

Next, Buch and Bartley (2002) studied the relationship between Kolb's theory of learning style and the preferred training methods of employees in financial institutions in the southeast USA. Questionnaires were given to 337 employees, and 165 were completed and returned. Friedman's and Chi-square statistical tests were applied to the data. They found a significant difference between different preferred training methods and different learning styles, and suggested that learners should take into account that, to maximise learning outcomes; learners should take responsibility for determining their own skill-acquisition agenda and learning style. They also recommended that learners' experience may be an important factor in driving the choice of learning style. They suggested that learning style would be an appropriate tool to investigate what trainers should do to facilitate learning in the organisation, but future research would require identifying other potential tools and strategies.

Heffeler (2001) studied the relationship between age and gender of the college students and their learning styles. Kolb's learning style inventory was applied, and data collected twice with eighty five and seventy respondents respectively. Product-moment correlation coefficients were used, but no correlation was found between age and learning style; there were gender differences in some learning styles. In addition, Severiens and Dam (1997) found that gender did not have a significant correlation with learning styles but age has a significant correlation

with learning styles. Similarly, Furnham (1992) found that the respondents with different personalities have different learning styles and use different decision-making strategies, which are effective in different business environment. Also, respondents with different levels of education are suited to different learning styles.

#### **5.4.4 Honey and Mumford's learning style**

Allinson and Hayes (1988) suggested that a further promising alternative theory might be a learning style developed by Honey and Mumford, and this has been widely accepted and applied by academic researchers and practitioners. Honey and Mumford theorised the four distinctive learning styles based on Kolb's learning cycle theory. Mumford (1994) posited that the learning cycle can help to create awareness of actions necessary to encourage continuity of learning, so learning style information can be best spotlighted for 'learning how to learn'. Although Honey and Mumford found Kolb's learning cycle acceptable, they were less happy with his Learning Style Inventory, being concerned about the use of one-word descriptors as a basis for attributing style, and expressing concern over the face validity of the styles themselves. In developing a learning style questionnaire, the approach of Honey and Mumford was to concentrate on observable behaviour rather than the psychological basis for that behaviour, and to identify learning styles that are meaningful to the managerial population (Allinson and Hayes, 1988). The Honey and Mumford learning style is intended

to probe the relative strengths of four different learning styles (Duff and Duffy, 2002).

Additionally, Honey and Mumford developed a learning cycle called the progressive learning cycle, composed of 1) Having and experience, 2) Reviewing, 3) Concluding, and 4) Planning (Mumford, 1994, p. 78). Their learning style is composed of Activist, Reflector, Theorist, and Pragmatist learners. *Activist* is defined as people who prefer to act rather than listen. They desire to work as a group rather than sit inactively listening to others talk. They also enjoy finding new challenges. Their natures are outgoing, open-minded, and exciting. *Reflectors* are defined as people who are cautious and meticulous. They like to think, consider, and then reflect on the facts. When they obtain information they will take time to consider the data, digest it, and then draw their conclusions. They prefer to observe rather than direct. *Theorists* are identified as people who learn best when they can review things in terms of a system, a concept, a model or a theory. Their approach to problems is consistently rational and logical. *Pragmatists* welcome the opportunity to experiment, trying out ideas to see if they work. They act quickly and confidently on ideas that interest them. They are essentially practical in their approach to problem solving (Honey and Mumford, 1992; 1995a; Mumford, 1995). Further, Honey and Mumford (1992) explained that they categorised four different styles of learning they are easy to remember, reinforce the stages people need to go through in order to balanced learners, and are widely understood, accepted and used by learners.

In their manual of learning style, Honey and Mumford (1992, p. 56-58) explained the contributions of different styles of managers. First, they suggested that those managers who are more likely to be *Activist* prefer to help their employees by providing them with the chance to learn from observing and reflecting on their work, taking a positive view of what is involved in a new situation, explaining to employees how to work through action, and reacting spontaneously to opportunities as they come up. Second, *Reflector* managers are likely to assist their employees by suggesting activities which can be observed, advising how observation can be carried out, classifying ways in which a problem can be analysed, discussing what may happen, evaluating what has happened, providing data or feedback in a controlled learning situation, recommending how to organise a management activity carefully, avoiding taking a lead in meeting employees, emphasising the importance of collecting data before acting, and giving a considered response to requests for help.

The *Theorist* manager is likely to assist employees by showing interest in any intellectually respectable idea, helping employees to identify an original cause of problems, explaining the systems or concepts involved in an activity, clarifying the logical validity of an answer, introducing complexity, aiming for clarity of structure of purpose, giving explanations with intellectual reasons, expecting high standards in the quality of data. Last, *Pragmatist* managers tend to help their employees by showing awareness of new ideas and techniques, demonstrating interest in specific action plans, pressing for relevant learning programmes with clear pay off, being open to new situations, believing that there is possibility of

improvement, releasing people for courses, and following specific suggestions on how to improve learning.

However, there are several criticisms of Honey and Mumford's learning styles. Duff (2001) proposed that the literature questions the reliability of their learning style questionnaire. Also, McCarter (2008) suggested that individuals have various learning styles rather than four learning styles. This learning styles theory may not be able to classify the styles of learning of individuals comprehensively. Although the intention of the concept is for use in the management field, it is also applied in educational research. Duff and Duffy (2002) found a failure to support the existence of either the bipolar dimensions or learning styles proposed by Honey and Mumford and found the LSQ to have only modest levels of internal consistency (ranging from 0.52 to 0.73 for the four style sub-scales). They said that LSQ is not an acceptable alternative to the Learning Style Inventory developed by Kolb and that its use in the field of higher education is premature.

On the contrary, a number of researchers have strongly supported and continue to implement Honey and Mumford's questionnaire in academic research within the management field. Allinson and Hayes (1988) revealed it to be more reliable and capable of actually measuring something than Kolb's learning style inventory. Ames (2003) applied Honey and Mumford's learning style to test students' attitudes to the use of computers. 1,028 students were asked to complete the survey; 232 were willing to participate. ANOVA and Correlation were used to test the data. The results showed that specific learning styles tended to be

associated with confidence in, and anxiety, about the use of computers. It also showed that, for students with a dominant learning style, there are important differences with respect to gender in attitudes towards computers. Ames suggested that if computer attitudes and learning styles are malleable and if it is possible to make an early identification of those having the learning styles most likely to be computer averse, then methods could be developed to make computer-facilitated instruction less of a cause of anxiety. Reduced computer anxiety will almost certainly lead to a greater likelihood of use and may increase affinity and confidence as well.

Broad et al. (2004) studied the change of learning style and whether web-based learning and teaching could effectively create an efficient and robust learning environment. Sixty respondents participated in this study, and data were subjected to T-test statistical analysis. They have found that the learning preference of respondents changed after they used web-based learning. There was no significant difference in overall performance between the group who had used web-based learning and who had not, suggesting that learning styles can change over time (Jenkins and Holley, 1991; Pinto et al., 1994). Also, there is value in using the web as a means of enhancing learning and teaching. Furthermore, Swannell (1992) and Hayes and Allinson (1996) applied Honey and Mumford's learning style to investigate the relationship between students' learning style and performance. They found a correlation between the theorist learning style and student performance for subjects in Mechanical and Integrated Engineering.

In addition, different instruments of learning styles from different researchers have been applied in different fields of study. Yildirim et al. (2008) studied the relationship between teachers' leadership styles and students' learning styles towards their academic achievement. They used alternative learning style questionnaires to test the learning style of their participants. Reid's (1984) Perceptual Learning Style Preference Questionnaire was given to 746 randomly selected participants. Two-way ANOVA test was used to determine whether the mean values differed according to students' academic performance. A two-group discriminant analysis was also used to explore the effect of leadership and learning style, and the subject field on academic achievement. They found that the teachers' leadership styles influenced students' academic performance, but that students' learning styles were not a significant factor affecting academic success.

Allinson and Hayes (1997) also proposed that the work of Kolb (1976; 1984) and Honey and Mumford (1982; 1986) had received considerable attention in the context of training and development in the management literature. Those learning style theories had been applied to help individuals identify their preferred ways of learning, to enhance their learning performance by matching their learning with the learning situation. It appears that there is a strong connection between Kolb's learning cycle and Honey and Mumford's learning style, which is not surprising as Honey and Mumford developed their learning style based on the David Kolb's learning cycle. The two theories are compared in table 1 below.

**Table 2: Classification of Learning Styles**

| Theory                         | Classification                                  |  |   |   |
|--------------------------------|---|--|---|---|
| Kolb's Learning Style          | Active Experimentation.<br>Direct Participation | Concrete Experience.<br>Tangible Objects | Abstract Conceptualising.<br>Theoretical Concepts | Reflective Observation.<br>Detached Observation |
| Honey-Mumford's Learning Style | Activist:<br>"I'll try anything once"           | Pragmatist:<br>"If it works, it's good"  | Theorist:<br>"If it's logical, it's good"         | Reflector:<br>"Be cautious"                     |

Kolb's learning cycle begins with Concrete Experience, described as Pragmatist in Honey and Mumford learning style: people who are proficient in applying techniques to realistic working situations. They know how to improve their immediate performance and how to take advantage of opportunities in practising and experimenting. However, they try to complete the tasks speedily by avoiding solutions that depend on theories or concepts.

Reflective Observation corresponds to the Reflector in the Honey and Mumford learning style: such people are good at working with critical and complicated problems. However, they require a certain period of time to think and plan, so they are not good at solving urgent problems. Next, Abstract Conceptualising relates to the Theorist in the Honey and Mumford learning style: people who are good at theorising and conceptualising. They tend not to participate in practical activities, but they are creative and are good at providing a solution for others to apply. Last, Active Experimentation is linked to Activist in the Honey and Mumford learning style: people who prefer to try new experience. These people come up with creative ideas that benefit the organisation and improve teamwork. On the other hand, they are not detail-oriented, so they are not suited for

meticulous jobs or time-consuming work. They like to lead rather than observe, and are not afraid of being in the spotlight (Kolb, 1976).

It appears, then, that these two concepts are closely connected. In Kolb's learning cycle, people can start learning at any stage, and different stages create different learning approaches. So, if a person has no single predominant style, meaning that all four styles are moderate, that person is likely to manage each stage of Kolb's learning cycle consciously. Honey and Mumford (1995b) assert that they have developed the Kolb learning cycle to classify people in different categories; they emphasise that their learning style theory could help people to understand their own learning style and to strengthen underdeveloped styles and thus produce more rounded learners.

In the long term, it is important for management people to increase organisational effectiveness, so managers may consider applying learning styles, and building up a learning environment to sustain competence (Kidd and Kanda, 2000; Michie and Sheehan-Quinn, 2001). A learning style may be appropriate in helping an individual to learn to identify and make better use of any kind of learning experience; it can change over time depending upon the situation and is perhaps related to personal experience and background (Gelderen et al., 2005; Mumford, 1994). Researchers and practitioners have applied learning style as a way to enhance a firm's performance, learning environment, and training approach. Although many theories classify the learning preferences of people, Kolb's and Honey and Mumford's learning styles are acceptable concepts. While

Kolb's both focus on behavioural types, the others learning styles focus on psychological types, such as MBTI and Dunn and Dunn's learning styles. It can be seen that MBTI is mainly used to classify personality of people rather than to analyse the way people behave in order to analyse information. Also, Dunn and Dunn's learning style is extensively used to enhance the level of learning within the classroom. In addition, the MBTI and Dunn and Dunn's learning styles are found to be widely applied in the educational field rather than in the management field.

However, the inconsistency and unreliability of Kolb's Learning Style Inventory (see, for example, Allinson and Hayes, 1990; Loo, 1996; 1999; Duff, 2004b), and the redundancy between learning style orientation and personality, plus the force-ranking score, this study has preferred Honey and Mumford's Learning Style and applied it to develop the questionnaire to test the predominant learning preference of managers, in sustaining organisational effectiveness.

## **6. Overview of Literature on Leadership Styles**

### **6.1 Definition of Leadership Style**

The concept of leadership has become increasingly familiar in discourses on management development over the last 20 years (Mumford and Gold, 2004, p. 9). Bryman (1986) proposed that leadership has a variety of definitions, and there

is no general agreement. For instance, Stogdill (1948) claimed leadership describes the influence relationship that exists between managers and subordinates who intend real changes and outcomes which reflect their shared purpose. Rauch and Behling (1984) defined leadership as the process of influencing the activities of an organised group towards goal achievement (Rauch and Behling, 1984). Similarly, Yukl (1989) proposed that leadership takes place among people; it involves the use of influence and is used to attain goals.

Jaques and Clement (1991) suggested that “leadership is the process in which one person sets the purpose or direction for one or more other persons, and gets them to move along together with him or her and with each other in that direction with competence and full commitment” (p. 4). Shackleton (1995, p. 2) described leadership as the process by which an individual influences members of the group towards the attainment of group or organisational goals.

Elaborating on the leadership role, Goleman (2000) asserted it may consist of creating agendas, establishing direction, aligning and motivating people as well as encouraging collaborative working, and producing positive and dramatic change. Thus, leadership may be defined as the process by which a person who serves as a manager assumes a distinctive responsibility for a wide range of tasks that are achieved chiefly through the efforts of other people (Bowditch and Buono, 2001). As such, Daft (2000) suggested that leadership comprised of an ability to influence people towards the attainment of goals (p. 502). Bedeian and

Hunt (2006) recommended that leadership is a subset of management, and both are important in order to facilitate organisational effectiveness. Nonetheless, Shriberg et al. (2005, p. 138) argued that leadership may be perceived as part of the management pie, but emphasised that “there is a good part of leadership that cannot be considered a subset of management”.

Generally, leadership could be defined as the capability of the manager to direct, inspire and motivate their employees to produce greater work than their normal level of performance, and ultimately this could contribute to an increase in organisational effectiveness.

## **6.2 The Concept of Leadership Style**

It could be argued that organisational learning is capable of continual regeneration as a result of the variety of knowledge, experience and skills of individuals within a culture where mutual questioning is encouraged and challenged around a shared purpose or vision (Johnson and Scholes, 2002).

Hence, to increase organisational effectiveness, the organisation needs to explore new ways and simultaneously exploit what they have learned. In this respect, exploration is defined as variance-seeking and includes the constructs of creativity and innovation, whereas exploitation is reliability-seeking and includes the learning of standard routines, transfer of existing knowledge and incremental variation (Lewin et al., 1999; March, 1991; Tushman et al., 2002).

The manager thus, plays a key role in transferring knowledge and encouraging the learning environment in the organisation (Handy, 1995). The sort of changes needed in the creation of organisational learning is extremely challenging and would need 'real leadership' (Senge, 2006). Arguably, it appears that leadership plays an important role in shaping and maintaining organisational culture (Schein, 1985).

According to the literature on leadership, it remains unclear how it is specifically formed or developed. Grint (1991) suggested that it may refer to the ability and skills to intervene in new situations regardless of previous experiences. It may also refer to the role of the leader in reflecting the problem-solving (p. 6-7). Torrington et al. (2005) further added that leadership is predominantly an innate ability that cannot be achieved simply through training. Nonetheless, they argue leadership skills could be further enhanced through education. Grint (1991) agrees with this view; whereby he noted "it would be strange if leadership was the only human skill that could not be enhanced through understanding and practice" (p.2).

Moreover, it can be argued that the management process would be greatly influenced by the personalised preferences, prejudices and attitudes of the firm manager. This applies strongly in small firms, whereby the personality and the needs of the manager would play a vital role in the business process. As such, the management process may not be analysed in isolation from the skills demanded

of the manager's role nor the nature of the organisation itself (Banfield et al., 1996).

Leadership on the part of the manager could also be further understood by considering how they develop their previous experiences and expertise to elucidate the ideas of followers and encourage more creativity (Mumford et al., 2003). As such, leadership may be seen as part of a learning process that takes place through carrying out day-to-day responsibilities. Logically, this may possibly be mediated through individual experience and learning preference.

Therefore, leadership is to a large extent, a crucial factor in allowing managers to explore and exploit resources from inside and outside the organisation and to create an environment conducive for learning within the organisation itself. As leadership can be learned, it could be mediated by previous individual learning experience and learning preferences. Hence, managers who possess the knowledge to develop their leadership in sustaining their organisation may subsequently enhance the overall organisational effectiveness.

### **6.3 The Importance of Leadership Style**

Arguably, leadership is a key factor to create organisational learning. This could be accomplished by building a sense of commitment among members of the organisation based on a shared vision (Senge, 1990). Furthermore, Daft (2000) recommended that leadership is predominantly significant in organisations

seeking to transform itself into a learning organisation. It is important to note, however, that different styles of leadership may develop different ways of encouraging employees (Bass, 1985b). Similarly, William et al. (1993) recognised that although everyone has the potential to be a leader, there is no single style or personality that is best for all situations. Nevertheless, regardless of which styles are adopted, it is widely accepted that leadership is an indispensable perspective which managers need to understand in order to promote organisational learning.

Kotter and Heskett (1992) were among the first to demonstrate that the single most important factor in successful organisational change is competent leadership. Leaders offer the highest leverage point for changes to take place because they are critical to establishing the strategic direction of the organisation as well as in creating and maintaining its culture (Kotter and Heskett, 1992). More importantly, scholars have emphasised that leadership and performance are two important and interrelated variables contributing to organisational effectiveness and thus there is a critical need to examine this relationship (see, for example, Hadikin and O'Driscoll, 2000; Tepper, 2000). It appears that leadership is an important ideal to the manager in their role to encourage learning, share knowledge with and transfer it to employees by means of appropriate styles in different situations for the purpose of achieving organisational goals.

In conclusion, leadership plays a vital role in developing, establishing and creating major changes in the organisation. This may subsequently enable the organisation seeking for competitive advantage to further acquire knowledge and increase its performance as a result.

## **6.4 The Process of Leadership Style**

For the duration of the 20<sup>th</sup> century, most of the research relating to leadership contemplated the traits, behaviours, and situational contexts of leaders. A brief summary of this thesis is important to provide an understanding of leadership research that precedes and lies beneath transactional and transformational leadership theory.

### **6.4.1 Trait Theory**

Previously, according to trait approaches, it was recommended that “leaders are born rather than made”. This revolved around the idea that some persons were born to lead due to their personal qualities while others are not (Bryman, 1999). At one time, this used to be the most conventional approach employed to categorise leaders’ characteristics. Leadership was perceived as not accessible to everyone. However, these approaches have become increasingly questioned for this assertion as there has been little consistency in the lists of traits that research has uncovered. Hence, in contemporary discourses, the proposition that leadership is denoted by certain traits has become less accepted (Cronin, 1983;

Torrington et al., 2005). In addition, according to Yukl (1981), there is little evidence to suggest that personal traits necessarily translate to leader success. Yukl criticised many trait theories studies for their simplistic research methodologies because they have studied only the relationship between a particular trait and leadership and so provided an incomplete picture. Additionally, Folkman and Zenger (2002) emphasised that several pieces of research have been conducted into this theory with children, so it is likely that other factors such as age, experience and social setting may influence the findings.

As an alternative, Goleman (1998) has suggested the concept of Emotional Intelligence which mainly focused on personal abilities rather than individual traits. In contrast to previous traits approaches, he recommended that leadership may be learned. In addition, Posner (2009) found that there is a positive association between leadership and learning styles. He suggested that managers who desire to develop their leadership may need to learn from their collective experience which they have been faced in relation to different problems in various situations. This may show that the managers who look back and learn from their experience may be able to perform more effectively.

#### **6.4.2 Leadership Behavior Theory**

In recent studies, research attention has extended to include the study of behavioural leadership focusing on the specific organisational situations. These

studies have attempted to highlight leadership behaviour in relation to guiding members towards producing high performance levels (Daft, 2000). For example, the Ohio State approach and managerial grid are classified as leadership behaviours. These approaches are predominantly task-related and relationship-related (Storey, 2004). This type of leadership research was based on questionnaires given to managers and their employees focused on how the leaders perceived their own styles and how the styles were perceived by the people they were supervising. Two basic factors were derived: initiating structure and consideration for others. Managers high on initiating structure are likely to tell their employees what to do and how to do it. Managers high on consideration focused on their employee's satisfaction, interpersonal needs, and general comfort. Thus managers high on initiating structure and low on consideration were viewed as authoritarian, while managers who were high on consideration and low on initiating structure were perceived as democratic. These trends were not universal so it was also possible for a leader to be high or low on both these dimensions at the same time. The initial outcomes of these studies suggested that consideration was more effective than initiating structure, especially in terms of maintaining members' satisfaction and performance, and reducing absenteeism and turnover.

However, Lussier and Achua (2009) argued that effective managers were supposed to be characterised by being high on *both* dimensions. Also, the "high-high" style did not lead to high member performance and satisfaction in all situations; they found unconvincing and at times contradictory findings. It

indicated that the style that was high on both initiating structure and consideration was generally the most complimentary, but they also suggested that it is clear that the situational factors may also need to be considered. This may show that the theory may not be able to explain the leadership of the manager precisely since the managers in the organisation are generally faced with different situations, and those situations may subsequently affect the leadership styles of the managers.

In addition, Bowditch and Buono (2001) asserted that the Management Grid was developed by Robert Blake and Jane Mouton. This theory is primarily focused on two dimensions: a concern for people and a concern for production. There are five different styles categorised in this theory.

1) Avoiding (1, 1): Exertion of minimum effort to get required work done is appropriate to sustain organisation membership.

2) Competing (1, 9): Thoughtful attention to the needs of the people for satisfying relationships leads to a comfortable friendly organisation atmosphere and work tempo.

3) Compromising (5, 5): Adequate organisation performance is possible through balancing the necessity to get work out while maintaining morale of people at a satisfactory level.

4) Accommodating (9, 1): Efficiency in operations results from arranging conditions of work in such a way that human elements interfere to a minimum degree.

5) Collaborating: Work accomplishment is from committed people; interdependence and a “common stake” in organisational purpose leads to relationships of trust and respect.

Bowditch and Buono (2001) also proposed that the high concern for both people and production is considered as the most valuable leadership style. The unique aspect of this particular approach is the assumption that each Grid style represents a pattern of thinking about or analysing a situation. However, they argued that since these orientations are not personality characteristics or fixed traits, they can be affected by training. In addition, Vliert et al. (1990) found that this theory appears to have a low degree of concurrent validity. It failed to distinguish between avoiding and accommodating. They recommended that avoiding and accommodating share a common theme: in both, an individual complies with an opponent's wishes. So, they suggested that it may be possible to increase the distance between these non-confronting strategies by contrasting the covert and uncooperative character of avoiding with the overt and cooperative character of accommodating.

Furthermore, Bowditch and Buono (2001) criticised that the leadership behaviour theories: the Ohio State approach and managerial grid, fail to capture the true

complexity of the leadership process. Although the behaviour approach seems to go beyond the trait theory of leadership, what these theories actually do is provide a list of styles or behaviours instead of a list of traits. Moreover, since empirical investigation has led to contradictory findings, it appears that there may be a need to continue to investigate the influence of individual differences and situational constraints on leadership.

### **6.4.3 Situational Theory**

To elaborate further on the different approaches in leadership, the situational and contingency theories need to be considered. Fiedler's Contingency Theory attempted to explain how leadership styles could be tailor-suited to particular situations to further improve organisational effectiveness. However, several researchers found that the usefulness of the concepts in Fiedler's contingency theory remain unclear. In particular, the ideas suggested may not be possible or desirable in practice. For instance, "if a task-oriented leader is matched with an unfavourable situation and is successful, the organisational situation is likely to improve and become more favourable to the leader; therefore, the leader might have to adjust his or her style or go to a new situation" (Hosking, 1981; Singh, 1983). It appears here that Fiedler's theory would suggest managers adjust the conditions of the situation to be compatible with the leadership style of the manager at all costs in order to improve organisational effectiveness. To some extent, Fiedler's theory could be argued to be too idealistic.

In contrast, Hersey and Blanchard (1984) apply the contingency approach differently by highlighting not only leader behaviour and style and situational contingencies, but also rewards to motivate employees (Evans, 1974). The use of rewards is further elaborated in House's (1971) Path-Goal theory. This concept is mainly concerned with the expectancy theory of the subordinates. It suggests that providing rewards are a useful tool for motivating the subordinates (Northouse, 2001). Arguably, the strength of this theory lies in its attempt to develop the expectancy theory vis-à-vis the leadership concept. This makes the Path-Goal theory unique from others with its emphasis on the expectations of the subordinates, rather than the leader alone. However, Yukl (1989) has criticised the Path-Goal theory on the basis that it focuses more on the relationship between the manager and individual subordinate rather than the entire subordinate group in the organisation. Similarly, Storey (2004) also noted that in general, trait, behaviour, and contingency leadership theories tend to overemphasise the significance of a small group of people over that of the entire organisation.

In addition, another contingency approach to leadership has concentrated on an examination of managers' behaviour and group participation in making decisions. This model was based on the studies of Vroom and Yetton (1978) who attempted to delineate a "rational way" of deciding on the form and amount of participation in decision making that should be used in different situations. There are five styles summarised as follows:

AI: Solving the problems or making the decision yourself, using information available at that time.

AII: Obtaining the necessary information from employees, then deciding on the solution to the problems. Whilst cascading information to employees. The role played by employees in making the decision is clearly one of providing the necessary information, rather than creating or reviewing alternative solutions.

CI: Sharing the problems with relevant employees individually, getting their ideas and suggestions without bringing them together as a group. Making decisions which may or may not reflect employees' influence.

CII: Sharing the problems with employees as a group, collectively acquiring their ideas and suggestions. Subsequently making a decision, which may or may not reflect employees' influence.

GII: Sharing a problem with employees as a group. Together generating and estimating alternatives and attempting to reach agreement on a solution. The role is much like that of chairperson, whilst not trying to influence the group to adopt a particular solution and accepting and implementing any solution that has the support of the whole group.

This model supposes that any one of these styles may be appropriate in a given situation. Since this can vary from situation to situation, the model has been extended to include a series of situational variables in a decision-tree. By responding to the series of questions raised in this framework, a manager can go through the decision-making tree until the end point is reached, suggesting that they develop an appropriate decision style for that particular situation. Thus, depending on the presence or absence of various contingencies, one particular decision style is argued to be more appropriate for solving problems than another. However, Lussier and Achua (2009) argued that the series of decision trees, even in decision tree format, make it dubious that managers can employ such an approach in practice.

Furthermore, Robbins and Judge (2007) emphasised that there is a need to develop situational theory. They found that there are relevant situational variables which affect the leadership styles of the manager composed of the task structure of the job; level of situational stress; level of group support; the manager's intelligence and experience; and employees' characteristics such as personality, experience, ability, and motivation. So, this shows that the situational theory may not be enough to explain the leadership styles of the manager because there may be other factors that needed to be included.

#### **6.4.4 Transformational and Transactional Leadership**

Nevertheless, irrespective of how the different theories conceptualise leadership, it remains widely accepted that the manager, as a leader plays a key part in ensuring organisational learning takes place. Highlighting this key role, Senge (2006, p. 321) asserted that “the neglected leadership role is that of the designer of the ship, no one has a more sweeping influence on the ship than the designer”. Moreover, leaders also face the task of developing and sustaining deep change in order to encourage learning in the organisation. Further, Daft (2000) suggested that the leader’s role in the process of organisational learning could be further subdivided into three distinct roles; to create and share vision; to design an appropriate horizontal structure to help to achieve this vision; and to act as servant leaders. It is argued that servant leadership facilitates the growth, goals, and empowerment of followers first in order to liberate their best qualities in pursuing organisational goals. Additionally, research have also suggested that transformational forms of leadership are particularly important in promoting organisational learning (Bass, 1985b; Bass and Avolio, 1989).

It has been suggested that the transformational leadership approach is more effective than others to create change in an organisation which is best compared with transactional leadership. In recent literature, Bass and Avolio are widely acknowledged for developing these new leadership concepts. According to (Bryman, 1999, p. 31), their basic ideas are heavily influenced by Burn’s (1978) work. Burn recommended that transactional leadership is more common place

than is transformational leadership, if less dramatic in its consequences. Bass (1985a) however, further developed the concepts of transactional and transformational leadership. He established them as two separate theories and distinguished the different features for transformational and transactional leadership (Judge and Piccolo, 2004).

Bass (1985a) proposed that transformational leaders are likely to make their employees trust, respect, and admire them by focusing on idealised influence, individualised consideration and inspirational motivation, which in turn, implies serving as a charismatic role model and expressing a vision that could be created. It also suggests a need for intellectual stimulation, defined as questioning old assumptions and the status quo (Avolio and Bass, 1995). This leadership style describes the managers who tend to focus on higher motivation development and motivate the subordinate's motivation by inspiring vision of the future (Bass, 1997). On a similar note, Yukl (1999) agreed that charismatic leadership and transformational leadership are partially overlapping concepts. Hence, it is suggested that transformational leadership could be considered the concept that covers comprehensively charismatic leadership, visionary leadership as well as cultural leadership (Kuhert, 1994). It also explains the process of leadership that is able to influence people in the organisation in both specific and general areas. To sum up, it describes managers who emphasise on building employees' motivation to generate productivity for the entire organisation.

Elaborating further, transformational leadership theory could be considered a form of behavioural theory. It is based on the premise that leadership could be learned (Bass, 1998). More importantly, there is substantial evidence suggesting that transformational leadership helps to increase higher levels of individual performance (Avolio and Yamamario, 2002; Bass, 1985b; 1990). For example, Hater and Bass, (1988) found that managers at Federal Express who were rated as transformational received higher performance evaluation. However, Yukl (1999) argued that Bass and Avolio's leadership theory would be stronger if the essential influence processes were identified more clearly and used to explain how each type of behaviour affects each type of mediating variable and outcome.

Arguably, as the preceding discussion strongly suggests, transformational leaders are often characterised as organisational heroes who can orchestrate turnarounds, launch new enterprises, and inspire organisational members. Through their personal charisma, these individuals inspire trust, faith and belief in themselves, their vision, and their actions. Yet while the virtues of these charismatic leaders are frequently praised in the popular management press, there can be a criticism of such forms of leadership.

Howell and Avolio (1992) noted that despite good intentions, this type of leader may become sufficiently captivated by their vision of what is best for the organisation, so that they unintentionally neglect internal and external signals that their vision might not be appropriate. Numerous cautionary tales exist where leaders were so carried away with their personal vision that they literally

destroyed their companies in the process. Another criticism is that this type of leader does not necessarily act in the best interests of their organisation. Many of these leaders use their power to remake their companies in their own image. These leaders often completely blur the boundary separating their personal interests from their organisation's interests. At its worst, the risks of this ego-driven charisma are leaders who allow their self-interest and personal goals to dominate the goals of the organisation. Likewise, these leaders sometimes surround themselves with employees who are afraid to question or challenge their opinion, so when the leaders make any mistake, the employees may not oppose the leaders' ideas (Bass, 1985b; Seltzer and Bass, 1990).

Compared to transformational leadership approach, transactional leadership is highly recognised as the traditional management function of leading (Bass, 1985a). There are three key dimensions making up transactional leadership namely contingent rewards, management by exception-active and management by exception-passive. Contingent rewards refer to the degree to which the leader sets up constructive transactions or exchanges with subordinates. Transactional leadership clarifies expectations and establishes the rewards for meeting these expectations. On the other hand, management by exception-active refers to managers who monitor subordinates' behaviour, anticipate problems and take corrective actions before the behaviour creates serious difficulties. In contrast, management by exception-passive means that the managers will take action when the behaviours of their subordinates have already produced problems (Judge and Piccolo, 2004).

It is noted that managers who have this leadership style are less likely to support their employees in terms of developing the skills. Instead they prefer to provide appropriate rewards and focus on clarifying the role and task requirements of employees and initiate structure (Kuhert, 1994). These attributes of transactional leadership could lead to an increase in organisational effectiveness as researches have also suggested that managers with this leadership style are likely to be diligent and broadminded. They are more concerned with the efficiency of the tasks than building members' abilities. They often stress the impersonal aspects of performance such as plans, schedules and budgets. They also tend to follow the organisational norms and values (Daft, 2000). However, transactional and transformational leadership should not be viewed as opposing approaches to getting things done. Transformational and transactional leadership complement each other, but that does not mean they are equally important. Hence, Bass, (1985b) and Seltzer and Bass (1990) proposed that to be effective, a combination of transactional and transformational leaders is required. Nonetheless, some studies have found a mix of both positive and negative correlation between transactional leadership and performance (Geyer and Steyrer, 1998; Howell et al., 2005).

In comparison to transformational and transactional leadership, laissez-faire or non-leadership describes managers who are neither task-oriented nor people-oriented. They let the subordinates work on their own. They avoid making decision, often hesitate in taking action and are more likely to be absent when needed. The laissez-faire leadership is also related to management by exception-

passive leadership (Judge and Piccolo, 2004). It appears that they are not highly motivated, their power only comes from their position in the organisation but they are less likely to carry out their responsibilities. Almost inevitably, laissez-faire leadership is likely to result in damaging consequences for the working environment, health and well-being of employees (Corrigan et al., 2000).

To date, several studies have investigated leadership style to find different ways to increase organisational effectiveness. For example, in highlighting the importance of knowledge-based diversity for R&D team, Shin and Jing (2007) also found that transformational leadership and educational specialisation heterogeneity interact with each other contributing substantially to team creativity as a result. They found that the two variables are strongly associated with team creativity. More specifically, the teams' creative efficiency mediated the moderated relationship between educational specialisation heterogeneity, transformational leadership and team creativity. Similarly, Jens and Kathrin (2007) studied the relationship between transactional, transformational and charismatic leadership and their impact on performance. 220 employees were asked to rate their managers. Hierarchical multiple regression methods were used to analyse the data. Firstly, they found that transformational and charismatic leadership are correlated with organisational effectiveness. Secondly, transformational leadership had a stronger correlation with organisational effectiveness than transactional leadership. They also found that transformational leadership improved the impact of both transactional and charismatic leadership on organisational effectiveness overall.

The effects of transformational leadership on organisational effectiveness was also studied by Colbert et al. (2008). 94 top management teams were used as the sample. They found that CEO transformational leadership was positively related to within-team goal importance congruence, which in turn was positively related to organisational effectiveness. Similarly, Howell et al. (2005) studied the relationship between leadership and organisational effectiveness. 101 managers were selected as their sample. They also found that transformational leadership is positively related to business performance, while contingent reward leadership was not significantly related to organisational effectiveness. Moreover, the findings also suggest that physical distance between managers and employees negatively mediated the relationship between transformational leadership and organisational effectiveness but it positively mediated the relationship between contingent reward leadership and organisational effectiveness. In addition, several studies have attempted to study the relationship between gender and leadership styles. They found that gender is significantly correlated with leadership styles. Female managers are likely to adopt more Transformational Leadership Styles (Bass et al., 1996). In contrast, Oshagbemi (2008) found that gender is not significantly correlated with the leadership styles of the managers but they found that age is directly related to leadership styles of the managers.

Leadership theory has also been applied in studies on human resource management and organisational effectiveness. Weichun et al. (2005) studied the relationship between human resource management and leadership style of the managers. A total of 170 firms in Singapore were used as samples. They found

that human resource management fully mediates the relationship between managers' transformational leadership and subjective assessment of organisational effectiveness. It also partially mediates the relationship between managers' transformational leadership and absenteeism.

McCall (1988) emphasised the relationship between leadership and the factors influencing development as a manager, explaining that the most positive impact on the development as a manager included: job assignments the executive had experienced; critical circumstance they had gone through; relationships and interactions with others; and formal training and education. Similarly, Dalton et al. (1999) emphasised that 75 per cent of career events that managers attribute to their successful development derived from a combination of learning from experience in taking responsibility for routine tasks, and learning from organisational members. In addition, Kouzes and Posner (1995) studied the relationship between learning styles and methods to increase the effectiveness of leadership. They found that learning through trial and error, observation of others, and through formal training or education are related to an increase in the effectiveness of leadership.

Similarly, Glastra et al. (2004) proposed that the organisation-created learning environment may support managers in developing the skills and reflexivity needed to handle the responsibilities necessary in today's business. Likewise, Brown and Posner (2001) explored the relationship between learning styles and leadership styles of managers. Their sample consisted of 312 respondents drawn

from three sources: managers from a large high-technology company; working professionals, across a variety of high-technology organisations; and a cross-section of managers enrolled in an Executive MBA programme. They found that learning styles are significantly associated with leadership styles. In other words, they found that how people learn is significantly correlated with how they act as managers. The results also indicated that the managers who frequently engaged in all four learning styles (action, thinking, feeling, and assessing others) also more frequently engaged in a greater variety of leadership style such as challenging, inspiring, enabling, modeling, and encouraging. The combination of learning styles and transformational leadership style are significantly correlated ( $r = 0.33, p < 0.001$ ). So, it is clear that the way managers learn plays a vital role in shaping their leadership style. The learning style may then help managers in understanding how to utilise their experience to improve their leadership style. In turn, managers may be able to transfer knowledge and strengthen their organisation for future challenges and increasing competitive and innovative abilities. Therefore, this may show that managers' different ways of learning may influence improvement of their leadership style.

Arnold et al. (2009) have investigated the managers' behaviours focused on the interplay between leadership styles and organisational effectiveness. They obtained complete data from all sources for 369 retail firms in which the store managers provided responses to all measures of retail chain activities and retail manager behaviours. They found that there is no support for the direct effect of transformational leadership on overall organisational effectiveness. They

explained that the benefit obtained from charismatic, transformational leadership may pay off only when the retailer sells services in highly competitive environments; transformational leadership is likely to be less effective at promoting product sales when competitive rivalry increases.

In a different context, Fred et al. (2005) studied the nature of the relationship between transformational leadership and two work-related attitudes i.e. organisational commitment and job satisfaction. They compared Kenya and the United States obtaining a response rate of 82% from Kenya and 86% from USA (158 respondents from Kenya and 189 respondents from USA respectively). They concluded that transformational leadership has a strong and positive significant association with organisational commitment and job satisfaction in both cultures. Kristy et al. (2007) studied the relationship between leadership style and learning style of the managers in non profit organisations. 148 managers were selected for analysis. The results suggest a strong connection between learning and leadership. Specifically, they found that the active use of a variety of strategies for learning from experience has a significant, positive relationship with transformational leadership. Learning through action was found to be a significant predictor of transformational leadership. They further suggested that future research should expand their scope of analysis to include the demographics of managers such as gender, age, experience in management, level of formal education, as well as personality factors to explain additional variance in transformational leadership.

Furthermore, in terms of cultural differences, Hofstede (1993, p. 81) emphasised that “there is no such thing as universal management theories”. Also, he explained the process of the manager in the American sense that 1.) a manager does not own a business but sells its skills to act on behalf of the owners; and 2.) a manager does not produce personally but is indispensable for making others produce, through motivation. Managers carry a high status and many American men and women aspire to the role. In the U.S., the manager is a cultural hero. Hofstede (1993, p. 86) also proposed that among the champions of economic development in the past thirty years are three countries mainly populated by Chinese living outside the Chinese mainland: Taiwan, Hong Kong and Singapore.

Moreover, overseas Chinese play a very important role in the economies of Indonesia, Malaysia, the Philippines and Thailand, where they form an ethnic minority. Hofstede (1993) asserted that overseas Chinese enterprises lack almost all the characteristics of modern management. They are likely to be small, cooperating for essential functions with other small organisations through networks based on personal relations. They are family-owned, without the separation between ownership and management typical in the West, or even in Japan and Korea. They normally focus on one product or market, with growth by opportunistic diversification; in this, they are extremely flexible. Decision making is centralised in the hands of one dominant family member, but other family members may be given new ventures to try their skills on. They are low-profile and extremely cost-conscious. This shows that the diversity in

management accepted in one nation may not be recognised in another, due to the difference of cultures. Plus, the appropriate ways of management in different countries may vary. Based on Hofstede's work (1993, p. 86) the culture of overseas Chinese may also influence the style of managers in Thailand, in managing their firms differently, such as their focus on one product and market, and relying on personal trust to build up a network.

In addition, even though effective leadership is seen as most desirable almost everywhere, in some cultures it is not. The study by House et al. (2004) into the relationship between the effectiveness of leadership and different cultures looked at six culturally implicit theories of leadership: Charismatic/Value-based, Team-Oriented, Participative, Autonomous, Humane, and Self-Protective leadership. In most cultures the first of these is considered most desirable. The second is desirable. The other leadership styles, except for the Self-Protective, are seen as acceptable. But whereas the first is universally desirable, the other patterns are often culturally contingent. To be ambitious, for instance, is "good" in some cultures and "bad" in others. They also found that Performance Orientation is related to all culturally implied theories of leadership, except for Self-Protective. Self-Protective leadership focuses on ensuring the safety and security of the individual and group through status enhancement and face saving. This leadership dimension includes five sub-scales labelled (a) self-centred, (b) status conscious, (c) conflict inducer, (d) face saver, and (e) procedural. Furthermore, Self-Protective leadership is linked especially to charismatic leadership. However, House and colleagues (2004) found that the respondents in Thailand

attained the highest rate of Self-Protective which is closely linked to the Charismatic/Value-based leadership. This may imply that different patterns of leadership style may be perceived as good patterns dependent on cultural factors.

In particular, House et al. (2004) proposed that Thailand is a developing country, the majority of whose people are Buddhist. They also suggested that in developing countries, particularly in the rural areas, the normal way of life is such that children take care of their parents and provide material help in their old age. The social norms help create culture. It is possible that Thailand is a Buddhism country which reflects a diversity of the cultures. Fundamentally, followers of this religion are encouraged to progress from becoming more compassionate to becoming more generous, to detaching themselves from worldly desires, to becoming more focused mentally on spiritual wisdom and purity (House et al., 2004). Hence, it may be possible that the religion of Thailand has developed a culture in which Thais are likely to be generous and normally look after their parents in their old age. So, this shows that the respondents in Thailand, who attain the highest rate of Self-Protective, closely linked to Charismatic/Value-based leadership, are likely to inspire, to motivate, and to expect high performance outcomes, and are relatively attached to the teaching of Buddhism which encourages people to be kind to others.

Related to the culture of Thailand, House et al. (2004) also found that Thailand scores highest on the Future Orientation value scale, defined as the degree to which individuals in organisations or societies engage in future-oriented

behaviours such as planning, investing in the future, and delaying individual or collective gratification. They proposed that this may be because Thailand has a distinct emphasis on Buddhism. In contrast, they found that the industrialised or developed countries with higher-income nations attained a lower score on the Future Orientation value scale. They explained that the higher-income nations may like to enjoy the present more because they have already accumulated substantial wealth and material resources. The lower-income nations may see a stronger need for taking a long-term perspective and sacrificing for the future because they must cope with scarce and limited resources. This shows that culture may influence the perception of Thais to have different concepts from the others. Hence, the appropriate leadership in other cultures may not be appropriate in Thailand.

To conclude, Bass and Avolio's approach to leadership is arguably, one of the most prominent leadership theories in contemporary research. It provides much insight on how to create change and sustain organisational learning for the entire organisation (Avolio, 1999; Judge and Bono, 2000; Bass 1985b; Bass and Avolio, 1989). Although a number of scholars have claimed that leadership is positively related to organisational effectiveness, the interplay between leadership and diversity remains largely unexplored (Jackson et al., 2003). Kristy et al. (2007) suggested that the demographics of managers need to be studied as well in relation to leadership and learning styles. Bass (1985b) and Seltzer and Bass (1990) pointed out that Transactional and Transformational leadership would not be viewed separately. It is noted that Transactional and

Transformational leadership relate to how to inspire employees and increase organisational effectiveness including consideration of individuals, intellectual stimulation, inspirational motivation, and idealised influence, as well as how managers can provide rewards appropriately. Hence, managers who apply both Transactional and Transformational leadership may increase the level of organisational effectiveness.

Nonetheless, based on Hofstede (1993), “there is no such thing as universal management theories”. Not only did House et al. (2004) say that Thailand is a developing country most of whose population is Buddhist, but Hofsted (1993) also asserted that Thailand is influenced by the overseas Chinese culture, in which managers may develop different approaches to achieving organisational goals, such as focusing on cost cutting or pricing strategies. So, it is possible that with different cultures, managers may develop different ways to improve organisational effectiveness. To a large extent, the leadership style which is supportive to this particular business is in need of further investigation. Taking into account the various strengths and limitations of previous research into leadership styles, this study attempts to incorporate Bass and Avolio’s leadership theory specifically and study its relationship to organisational effectiveness.

## **7. The link between Learning Styles, Leadership Styles and Organisational Effectiveness**

The resource-based view was seen as the concept to support the organisation seeking for competitive advantage, possibly by being able to obtain and employ valuable, scarce and inimitable resources (Barney, 1995). Human resource management may be applied to help the organisation to ensure the involvement and commitment of employees as a direction to lead an organisation to increased organisational effectiveness (Guest et al., 2003).

Kolb and Smith (1996) asserted that people learn through their experience, and the role of experience is important in shaping the process of learning. Relating this to the leadership style of the manager, as suggested by Kouzes and Posner (1995), stated that role experience is strongly connected to the way managers learn how to lead. This shows that the role of experience would allow managers to effectively learn from their own experience and the experience of others. Brown and Posner (2001) found that how people learn is significantly correlated with how they act as managers. The results also indicated that the managers who frequently engaged in all four learning styles (action, thinking, feeling, and assessing others) also employed a greater variety of leadership styles, such as challenging, inspiring, enabling, modelling, and encouraging. A combination of learning styles and transformational leadership style are significantly correlated.

Marquardt (2004) also asserted that what managers learn and how they learn cannot be disconnected because how an individual learns influences what he learns. This may suggest that a learning style which helps managers to understand how they learn may help them to learn more effectively. Ellinger et al. (2002) found that the majority of people in the workplace learned in an informal manner. Likewise, Fox (1997) proposed that much of what is learned by managers is learned informally.

On the other hand, McCall et al. (1988) found that the factors that impact on the development of leadership are job assignments that the manager had experienced; critical situations that they had gone through; relationships and interactions with others; and formal training and education. Posner (2009) also proposed that people learn from their experience, whether formal or informal, structured or naturally occurring. Hence, this shows that although managers may learn through their experience formally or informally, learning styles have a positive correlation with leadership styles, and may help managers to apply and learn more effectively through their experience.

As argued by Posner (2009), individuals who can learn from more than one category and thus have a greater repertoire of learning styles at their disposal are better able to learn about leading and becoming leaders. This happens because they are more capable of approaching and learning from a greater variety of situations than those more narrowly focused or limited in their methodology for learning. And this may lead to increase the ability of managers to utilise their

leadership successfully. Posner (2009) also recommended that leadership development is a learning process in itself. Hence, learning styles may help managers who aspire to develop to understand how to learn effectively; they may utilise their leadership style to manage their firm productively.

Justifiably, the careful development of managers will have a positive influence on organisational effectiveness (Mabey and Ramirez, 2005). The managers who know how to learn effectively and utilise their leadership effectively would be able to sustain the inimitable capabilities of their employees through HRM practices. In the long term, this would enhance organisational effectiveness.

## **8. Conclusion**

A number of scholars have proposed that organisational learning contributes significantly to organisational effectiveness (see, for example, Garvin, 1993; Nicholas, 2005; Pemberton and Stonehouse, 2000; Senge, 1990; 2006). Therefore, organisational learning is arguably one of the most promising tools needed to enhance the productivity levels of an organisation (Torrington et al., 2005). However, Anthony (1995) added that in order to ensure organisational learning takes place effectively, the management may consider how the learning style of the organisation within their firms could conflict or complement one another.

In addition, empirical studies have also highlighted a strong relationship exists between managers' competences and firm performance (Jaworski and Kohli, 1993; Pelham and Wilson 1996; Slater and Narver 1994). Hence, it is crucial for managers to understand their own learning styles in order to develop themselves and transfer their knowledge to others. In other words, a great leader is required to nurture a learning environment from within the organisation itself (Handy, 1995). Particularly for small businesses, the individual manager will play a central role as he or she is likely to be its owner or founder. It could also be the case that he or she is the chief executive that has turned round the business at a difficult time and therefore is in a position to utilise that knowledge and experience in order to sustain and/or increase the firm's financial performance (Johnson and Scholes, 2002, p. 65). In addition, different leadership styles are likely to create different levels of performance. Therefore, it is important to investigate thoroughly which ones are effective and supportive towards creating organisational learning which in effect, could contribute towards organisational effectiveness overall.

Shartle (1957, p. 287) recommended that it is proper and feasible to make a study of leadership in places where leadership would appear to exist and that if a person occupies a leadership position he or she is a fit subject for study. Referring to contemporary research linking organisational effectiveness and leadership styles of the manager, Colbert et al. (2008) highlighted the lack of literature on intervening mechanisms that may shape this relationship. Therefore, in this study, the indirect influences of potential variables specifically the

demographics and learning styles of managers will be considered. This study proposes to test the mediation effects of the leadership style towards organisational effectiveness with an aim to understand how to increase organisational effectiveness and at the same time explore alternative ways to achieving this goal.

The following chapter discussed the research methods applied in this thesis covering quantitative and qualitative approaches.

# **CHAPTER 3 RESEARCH METHODOLOGY**

## **1. Introduction**

This chapter first specifies the study's research objectives, followed by an explanation of how the research methodology plays a vital role in social sciences, and a discussion of how the deductive and inductive approaches have been extended to analyse the data. The research design explains how data was gathered and how quantitative and qualitative methods have been applied in this research. This is followed by an explanation of the procedures of each method and, lastly, the reliability and validity of each method is discussed.

## **2. Research Objectives**

This study aims to determine the roles of effective managers, and to investigate and clarify the characteristics of effective managers. Hence, there are three objectives:

1. To study the relationships between managers' learning styles, their leadership styles and the effectiveness of their organisations.
2. To explore and clarify effective learning styles and leadership styles of managers.

3. To consider which attributes managers might adopt in order to adjust their learning and leadership styles to more effectively and efficiently manage their firms.

### **3. Methodological Issues**

In a rapidly changing world, new problems and issues are emerging which demand innovation and flexibility. The philosophy of social science is to attempt to establish connections with the everyday experience of those being studied, and to ensure that the results of social scientific research are made accessible to a wide audience. Scientific or objective knowledge can be taken as a true account of something, and scientific explanations can be applied universally. This is particularly true when knowledge is detached from specific experience in a single situation; in this case, objective knowledge is reflected in the manifestation of causal processes (Smith, 1998, p. 5, 27).

For the social sciences, achieving knowledge is by both deduction and induction. While deduction tends to be related to the quantitative approach, induction is likely to be associated with a qualitative approach; they are simply different ways of conducting social investigations and may be conceived of as being appropriate to different kinds of research question (Bryman, 2006, p. 5). Gearing (2007) suggested that there are two ways to learn how to construct a house: by studying the construction of many houses, or the construction of a particular house. The first technique is called cross-case, and the latter is a case study. Although they

are different, they are mutually dependent. Cross-case study naturally provides a broader view to understanding the significance of any subject. In contrast, “a case study provides more insight to intensively study the individual substance. It is difficult to imagine cross-case research that does not draw upon case study work, or case study work that discards adjacent cases. They are unique, but synergistic, tools in the analysis of social life” (Gearing, 2004). Two types of case study approach are employed in this research.

To a large extent, cross-case analysis is more appropriate in the quantitative technique. Morse (1991) and Gearing (2007) asserted that a cross-case study generally requires a large sample consisting of multiple cases which can be analysed statistically. The central philosophy of the quantitative approach is that everything in the universe can be described numerically (McQueen and Knussen, 2002). According to Saunders et al. (2003), “to pursue the principle of scientific rigour the deductive approach dictates that the researcher should be independent of what is being observed”. Hence, a number of samples were collected and analysed formally in the quantitative phase: age, gender, education level and the length of management experience, need to be recorded in a way that enables events to be measured quantitatively (Saunders et al., 2003). Similarly, the learning and leadership styles of managers who have different demographic backgrounds may also vary and may lead to different levels of business success. Furthermore, the researcher realises that this analysis is implicitly related to the specificities of business situations; therefore, this research requires an

understanding of the meanings humans attach to events, such as the perspective of managers in terms of managing their firms.

The nature of the quantitative approach helps to explain relationships among the variables which were investigated in this study. This approach is employed to investigate the main objectives of this research, i.e. to identify the characteristics of small tyre firms' managers and explore their relationship to the success of the firm through a consideration of learning style and leadership style theories. Upon studying these patterns and relationships, hypotheses have been developed to test the relationship between managers' demographics, learning style, leadership style and organisational effectiveness. In addition, the learning and leadership styles found to be supportive to the firms are explained. Hence, this research focuses on the leading firms which are more effective in terms of business performance, and hypotheses have been established to find the correlation between learning and leadership styles and business performance. The collection of quantitative data carried out to test these hypotheses has used Descriptive Statistics, Independent Sample T-Test, One-Way ANOVA, Correlation and Multiple Regression.

Compared to cross-case studies, case study research examines a single case, or may refer to particular research work that includes several studies. Balnaves and Caputi (2001) proposed that a case study helps to investigate what is happening and is very common in exploratory work. It is useful in those disciplines where the emphasis is on description and explanation (Bryman, 2006). Where the

generalist prefers to apply cross cases and tends to be quantitatively oriented, area specialists tend to be qualitatively oriented (Ragin, 1989, p. 70). Arguably, applying a qualitative approach to understanding the pattern in the case study would be helpful for classifying patterns of associations between factors. It may also contribute to explaining the variables in the analysis of large-scale surveys and cumulative data.

There are two main types of qualitative research: the in-depth interview and the group interview. In this study, the main interest is to understand the characteristics of the manager of each firm, so in-depth interview is likely to be an appropriate technique, as it aims to get detailed information from the respondents. There may be an interview guide, but no questionnaire is used. Although the unstructured nature of this type of interviewing may consume an excessive amount of time (Bryman, 2006), it has its advantages and is appropriate for identifying managers' skills.

In conclusion, even though deductive and inductive approaches can be compared through a series of issues such as richness of data, these issues do not imply that one particular paradigm is more powerful than the other. Within each issue there are relative advantages and disadvantages specific to the research question under investigation (Malhotra and Birks, 2003). For example, it appears that the use of the inductive approach could generate empirical data, which is also one of the key defining features of the deductive approach. As such, the quantitative and qualitative dichotomy may not be sustainable. Furthermore, Saunders et al.

(2003) suggested that combining quantitative and qualitative approaches could be advantageous in order to draw the distinctive strengths of each approach, thus contributing further to understanding the phenomena of the research. Employing these different approaches simultaneously could generate various advantages to this study, so in this research both quantitative and qualitative approaches have been applied to examine the data.

#### **4. Research Methods and Designs**

This section summarises how this study reaches answers to the research questions; more specifically, to provide an overview of the research field and identify characteristics of managers, both questionnaire and interview methods have been applied to triangulate the findings. As noted by Saunders et al. (2003), employing a multi-method approach allows for a fuller validation and corroboration of research findings. The compatibility of quantitative and qualitative methods and the use of primary and secondary data are also noted by the researcher, and data from previous academic research has been used as a guideline. In support of the primary data, the results from in-depth interview have been grouped accordingly and used to shed light on the complicated situations in which managers have applied their experience in the workplace. The results from the questionnaire have been analysed using the Statistics Package for Social Science program. Additionally, secondary data has been used to represent the overall image of this industry. Thus, the researcher aims to devise a multi-method approach to apply to the empirical questions of this paper with the

purpose of ensuring that the data collected from the research will have practical applications.

In social science research, the survey strategy is one of the most useful methods to apply in order to draw general conclusions, if the samples have been selected appropriately. Generally, survey research concerns the opinions, attitudes, motives, values and norms of the research units. The survey method is most commonly associated with the written questionnaire (Velde et al., 2004, p. 77). In this study, as part of the deductive approach, the survey technique has been employed as a tool to collect empirical data from the respondents. It is thus essential that the unit of analysis needs to be identified along with the primary and secondary data that need to be classified beforehand in order to select useful information which is related to the research topic for the data analysis (Balnaves and Caputi, 2001).

#### **4.1 Unit of Analysis**

In order to draw an appropriate sample from which results can be generalised, it is essential that the unit of analysis be identified and be appropriate in terms of the research objectives (Balnaves and Caputi, 2001; Velde et al., 2004). According to Saunders et al. (2003), “the majority of managers are familiar with the deductive approach so that those managers or policy-makers tend to put faith in the conclusions emanating from this approach.” Particularly in the context of small businesses, the individual may be central to the management process, so it

cannot be viewed in isolation from the skills demanded of the managers' role (Banfield et al., 1996; Johnson and Scholes, 2002, p. 65). Therefore, managers are therefore selected as the unit of analysis in this study.

#### **4.2 Primary Data**

The questionnaire is one of the most widely used survey data-collection techniques. It refers to all techniques of data collection in which individuals are asked to respond to the same set of questions in a predetermined order (deVaus, 2002). There are several advantages of conducting a questionnaire. It provides a comparatively effortless and straightforward approach to the study's attitudes, values, beliefs and motives (Robson, 2002). And it is also relatively efficient in terms of time and money. It is suitable for both descriptive questions and testing hypotheses (May, 2001). However, there are some disadvantages: it depends on the willingness and the ability of respondents to answer the questionnaire (Velde et al., 2004). Robson (2002) proposed that "what they say might contradict with what they have done and they will not necessary report their real attitudes." In that case, the respondents may offer partial or biased answers and the result may not be accurate.

Therefore, the researcher asked respondents whether they were willing to participate in the research, and combined primary and secondary data as well as applying triangulation in order to enhance the reliability and validity. Hence,

regarding the research objective, it was germane to apply this approach to collect data because the respondents of small tyre firms hold management positions.

### **4.3 Secondary Data**

Saunders et al. (2003) believed that secondary data could be separated into three main subgroups: documentary, survey-based data and those compiled from multiple sources. Certainly, documentary data plays a vital role in this study. There are books, journal and newspaper articles, surveys, and publicly available official statistics of the Thai government, many available via the internet. Different types of documentary data have also been used to support the analysis of the research questions and meet the research objectives.

The main advantage of using secondary data is the saving of resources such as time and money (Ghauri and Gronhaugh, 2002); it is easily accessible, relatively inexpensive and quickly obtained (Malhotra and Birks, 2003). Saunders et al. (2003) stated that “if you need your data quickly, secondary data may be the only viable alternative.” The savings give the researcher more time to think about theoretical aims and substantive issues.

However, there are some disadvantages; for example, gaining access to the data may be difficult or costly. Saunders et al. (2003) suggested that there are a range of available online indexes with direct linkages to downloadable files, but such

sources may not be valid or reliable. Therefore, the secondary data used in this study was carefully selected.

For the inductive approach, the qualitative approach allows the researcher to observe the unit of study and acquire more information. It presents richly descriptive reports of individuals' perceptions, attitudes, beliefs, views and feelings, the meanings and interpretations given to events and things, as well as their behaviour (Hakim, 2000, p. 34). The interviewees are also given more freedom than in the survey interview (Bryman, 2006), as an in-depth interview enables respondents to steer the conversation, and clarifies the reasons for differences between stated attitudes and behaviour (Hakim, 2000, p. 36). Robson (2002) suggests that "exploratory studies are a valuable means of finding out what is happening; to seek new insights; to ask questions and to assess phenomena in a new light". Although this will be time-consuming, this strategy has been selected to obtain a feel for the key issues after embarking on a questionnaire, and will give confidence and useful evidence in exploring and combining the most important issues in term of triangulating the two methods (Saunders et al., 2003).

Due to the nature of this particular industry, the management deals with a variety of complicated situations and problems. Different managers have different approaches to managing and sustaining their firms. In order to understand the different techniques they have applied in different circumstances, a face-to-face interview is one of the most useful approaches; thus, this research uses the

inductive approach to help understand the phenomena of this business comprehensively.

Differences between the quantitative and qualitative approaches have already been noted. The quantitative is more likely to concentrate on providing broad generalisations beyond the confines of the research location. Surveys are potentially linked to qualitative research and provide an excellent sampling frame for linked case studies that examine particular situations, groups, or processes in greater depth. Qualitative approaches provide richer data specific to the phenomena of a single case. Interview have been used by some qualitative researchers to collect data on relevant themes (Bryman, 2006). In the social sciences, various methods of data collection are generally used; the report of the survey research could be characterised as an intervention in the organisation, instead of it being the end point of the research. Survey research can also be part of a case study (Velde et al., 2004, p. 76).

Ideally, combining these two approaches would reduce bias (Ragin, 1989). In this research, the survey was conducted with different managers, to understand the correlation among managers' demographics, learning style, and leadership style, towards organisational effectiveness. After that, two groups of respondents were interviewed to study the managers' skills in relation to their attitudes, behaviour, and the techniques they apply to manage their firm.

In conclusion, quantitative and qualitative approaches offer different pros and cons. The quantitative is likely to be more time saving, but the qualitative could provide more comprehensive answer. Because the two approaches have different strengths and weaknesses, triangulating the two techniques would be helpful in reducing bias. Choosing managers of small firms within the same industry as the unit of analysis ensures that they have the same levels of understanding and backgrounds, and the nature of their position allows them to deal with different circumstances in the business. Therefore, in this study, both quantitative and qualitative approaches have been applied to study the behaviour and attitudes of the managers as the unit of analysis.

## **5. Quantitative Approach**

### **5.1 Attitude Scales**

Attitude scales, which play an important role within question design, are composed of a set of statements, and the respondent is asked to agree or disagree with the pre-coded answers. It is then possible to test a series of attitudes around a particular topic, rather than relying upon a single question as the indicator of a possibly complex set of attitudes (Oppenheim, 1992). In this study applied the Likert-scale form of question to place respondents' answers on an attitude continuum. Likert (1932) is the most common form of multiple-item scales, allowing agreement or disagreement on individual items. However, error or bias

may if respondents avoid selecting the extreme response categories, or underestimate or overestimate the qualities of people or things they dislike or like. Balnaves and Caputi (2001) suggested that it is therefore essential to test the validity and reliability of items in scales. One of the most popular ways to ensure internal consistency is Cronbach's coefficient alpha (Saunders et al., 2003), which explains inter-relationships among the various items used to measure respondents' underlying attitudes. Cronbach's coefficient alpha ranges from 0 to 1: the closer to 1 indicates higher reliability and the minimum value accepted should ensure a reliability of 0.8 (Auamnoy, 2002; Bryman and Cramer, 2001; Pallant, 2001).

## **5.2 Pilot Study**

The purpose of the pilot study is to improve the questionnaire so that respondents will not have difficulties in understanding and answering questions. It also provides a better understanding of the frame of reference relevant to the questionnaire and question wording. It may also help test the validity and reliability of the data that will be collected (Balnaves and Caputi, 2001; Saunders et al., 2003). Fink (1995) suggested that the minimum number of subjects for a pilot study is ten, which are adequate for a large survey of 100 to 200 responses (Dillman, 2000). 30 sets of the pilot questionnaire were distributed in August 2005 to the managers of small tyre firms in north-east Thailand.

As a result of the pilot study, some of the respondents suggested different ways of structuring the question to be more specific, and some of these suggestions were implemented. For example, questions on age could ask for specific date of birth instead of the age in years. This was also emphasised by May (2001).

In addition, classification questions in the “personal” section of the questionnaire, often referred to as demographics, might cause some discomfort (May, 2001) if, as in the pilot study, they are located at the beginning of the questionnaire; these questions were relocated to the last section of the questionnaire (see pilot study questionnaire in appendix C).

To ensure the validity and reliability of the questionnaire, Cronbach’s coefficient alpha was applied to test the internal consistency of each question in both the learning and leadership style sections of the questionnaire (see tables 1 to 14 in appendix A). For the learning style section, the results of Cronbach’s coefficient suggest that Activist is equivalent to 0.817, Pragmatist to 0.822, Reflector to 0.816, and Theorist to 0.812. For leadership style, Transformational leadership is equivalent to 0.829, Transactional leadership to 0.842, and Laissez-faire to 0.828. Auamnoy (2002) and Pallant (2001) suggest that the minimum acceptable value of Cronbach’s coefficient alpha should suggest a reliability of 0.8, was exceeded in every case.

### 5.3 Survey Design

There are four sections in the questionnaires (see actual field work questionnaire in appendix D):

1. Learning Style is composed of 20 Likert's scale questions, while 5 questions in each learning category were designed to identify the respondents' attitude:

- Activist = question number 2, 3, 4, 5, and 16
- Pragmatist = question number 7, 8, 9, 10, and 17
- Reflector = question number 12, 13, 14, 15, and 18
- Theorist = question number 1, 6, 11, 19, and 20

2. Leadership Style

- Transformational leadership = question number 21, 22, 23, 24, 28, 29, 30, 31, 35, 36, 37, 38
- Transactional leadership = question number 25, 26, 32, 33, 39, 40
- Laissez-faire leadership = question number 27, 34, 41

3. Organisational Effectiveness = question number 43

4. Demographics of the respondents and backgrounds of the firm = question number 44, 45, 46, 47, and 48

In the questionnaire, questions in the first section are related to 20 Likert's scale questions are related to the learning style of the respondent. In the second section, 21 Likert's scale questions are related to the leadership style, and in the third, the question is about the overall financial performance of the firm. In the fourth section, questions are related to the demographics of the respondents covering age, gender, education level, and experience. The numbers of employees is also required, to classify the size of the firm.

#### **5.4 Sampling**

This research focuses on the north-eastern part of Thailand, the most densely populated region with approximately 21,386,000 people (Thailand. Ministry of Transportation, 2008). Research shows 297 small tyre firms in this area (Thailand. Ministry of Commerce, 2005). Random sampling methods were used to collect data; each sample in the sampling frame had an equal probability of being selected (Balnaves and Caputi, 2001).

Furthermore, Krejcie and Morgan's is one of the most commonly used formula for determining sample size (Krejcie and Morgan, 1970). Their table shows that for a population size of 290, a sample size of no less than 165 is recommended (see table 15 in appendix A). In this study however, the total number of registered companies were found to be 297 and as such, questionnaires were sent out to 220 of these companies. A total of 140 completed questionnaires were received which amounted to a response rate of 63.6%. This is a considerably

positive response rate which could improve the validity of the research and generalisability of the findings. Hair et al. (2006) suggested that a ratio of 5:1 is the standard to achieve to ensure that the data collected would be adequate to reflect the phenomenon being studied. More specifically, taking into account all the independent variables, a sample that is at least one-fifth of the target population size is required. Thus, the high response rate could further contribute to the representativeness of the data collected. In this study, 12 independent variables were analysed i.e. Gender, Age, Experience, Education, Number of Employees, Activist, Pragmatist, Reflector, Theorist, Transformational Leadership, Transactional Leadership and Laissez-faire leadership. Therefore, the minimum sample size required is estimated to be at least 60. A total of 140 questionnaires were returned which suggest that it is more than satisfactory. In addition, Cole et al. (1997) suggested that mail surveys are expected to have response rates of 11 to 15%; ours is a more than satisfactory.

In addition, the sample was small tyre firms in the North East of Thailand, the country's most densely populated region and the one with a moderately high number of cars. Not surprisingly, the requirement for tyres is fairly high as well. The collected sample of 140 firms represents the overall picture of this region. However, the total of 140 completed questionnaires received, which amounted to a response rate of 63.6%, may affect the findings since there may be a response bias inherent in the survey method: it depends on the readiness and the capability of respondents to answer and return the questionnaire (Velde et al., 2004). Robson (2002) said that "what they say might contradict what they have done

and they will not necessarily report their real attitudes.” So, the respondents may have provided incomplete answers and the results may not be accurate. This means that there may be bias and this may affect the analysis.

Furthermore, in this thesis, a list of firms was used to select a base of companies that were sent a survey questionnaire. Moreover, the list of the firms may not be accurate; it is possible that some firms in different parts of the Northeast region may be missing. In that case, the sample may not have been selected equally. So, such bias may therefore affect the data analysis of this study. However, to ensure that bias did not happen during the selection process, it may be best to formally test the selection bias.

In addition, the more samples the researcher can obtain would lead to more precision of data analysis. Krejcie and Morgan’s formula proposed that  $P$  is the population proportion which is assumed to be 0.5 since this would provide the maximum sample size. However, Naing et al. (2006) argued that it is not always true that setting  $P = 0.5$  would provide the biggest sample size. Therefore, the sample calculated as shown in the table of Krejcie and Morgan (1970) may not be entirely accurate. Hence, in this thesis, the Heckman’s sample selection bias test was used to check whether bias has occurred in the process of sample selection.

## **5.5 A standard Heckman Test for response bias**

Heckman (1979) proposed that sample selection bias may arise in practice for two reasons. First, there may be self-selection by the individuals or data units being investigated. Second, sample selection decisions by analysts or data processors operate in much the same fashion as self-selection. In this thesis, to assure that there is no bias in the sample selection, the Heckman's sample selection bias test was applied.

Samples were collected from Northeast Thailand. To ensure that bias did not occur during the sample selection process, the location of firms was categorised. Statistical software called "Stata" was applied to analyse the data (StataCorp, 2007). Samples were classified based on the region in which each firm is located within Northeast Thailand. Northeast Thailand is composed of 19 provinces; 1. Nong Khai, 2. Loei, 3. Nong Bua Lamphu, 4. Udon Thani, 5. Sakon Nakhon, 6. Nakhon Phanom, 7. Khon Kaen, 8. Kalasin, 9. Mukdahan, 10. Chaiyaphum, 11. Maha Sarakham, 12. Roi Et, 13. Yasothon, 14. Amnaj Charoen, 15. Nakhon Ratchasima, 16. Buri Ram, 17. Surin, 18. Si Sa Ket, 19. Ubon Ratchathani. There are three different regions where firms were categorised, 1. Upper Northeast, 2. Middle Northeast, and 3. Lower Northeast (Thailand. Office of Public Sector Development Commission, 2010). Therefore, samples were converted into dummy variables as 1 = Upper Northeast, 2 = Middle Northeast, and 3 = Lower Northeast. In addition, the test of Heckman's sample selection bias was used to

analyse whether bias occurred in the process of sample selection. The main general linear model is shown below:

$$Y = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8 + b_9 X_9 + b_{10} X_{10} + b_{11} X_{11} + b_{12} X_{12}$$

Where:

$b_0$  = Constant

$X_1$  = Number of Employees

$X_2$  = Age

$X_3$  = Experience

$X_4$  = Gender

$X_5$  = Education

$X_6$  = Activist

$X_7$  = Pragmatist

$X_8$  = Reflector

$X_9$  = Theorist

$X_{10}$  = Transformational Leadership

$X_{11}$  = Transactional Leadership

$X_{12}$  = Laissez-faire Leadership

$Y$  = Organisational Effectiveness

It was found that chi-square (degree of freedom=1) of Log-likelihood Ratio test (LR test) is equal to 2.47, which is insignificant at 0.05 per cent level of confidence. Therefore, the null hypothesis was accepted ( $\rho = 0$ ); in other

words, according to region dummies, there is no selection bias between the response and non-response samples. In addition, the results of multiple regression and two-stage least-square regression model to control for selection bias indicated that the coefficient values of each key independent variable of this study are consistent with those presented in Chapter 5 (See appendix H, Table 34 A standard Heckman test for response bias and the results presented in Chapter 5, p. 202). Therefore, this can be ensured that the results presented in this study are satisfactory without selection bias.

## **5.6 Data Collection**

The data collection took place from September to December 2005. Prior to conducting the questionnaires, the researcher had contacted the respondents to ask for participation and to notify them that their answers would be confidentially and the content of the questionnaires used for academic purposes only. May (2001) suggests three main ways of conducting questionnaires: 1) Mail or self-completion questionnaire, 2) Telephone survey, 3) Face-to-face interview schedule. The first is a relatively cheap method of data collection, but the response rate is likely to be low. In order to raise the response rates, reminders and telephone calls were made two to four weeks after posting the initial questionnaire, and envelopes and stamps were provided for the return questionnaire. Telephone surveys are convenient and relatively cheap, and also offer faster collection; to ensure the number of returns and save time and money, a telephone survey was used simultaneously with the mail method. A face-to-

face interview schedule is time consuming, but it offers a clear, standardised and concise way to record the answers in accordance with the survey instructions, and maintains a rapport with the respondents (Fowler 1988, p. 107). To ensure that questionnaires were delivered safely to as many respondents as possible within the time limitation, the researcher arranged to hand them to some respondents in person.

### **5.7 Reliability**

Reliability refers to the stability, accuracy and dependability of data (Burns, 2000). Also, a valid question will enable accurate data to be collected, and one that is reliable will mean that the data is collected consistently (Saunders et al., 2003). Foddy (1994, p. 17) suggests that “the question must be understood by the respondent in the way intended by the researcher and the answer given by the respondent must be understood by the researcher in the way intended by the respondent”. Saunders et al. (2003) suggest that “internal consistency” involves correlating the responses to each question with answers to other questions in the questionnaire. It therefore measures the consistency of responses across either all the questions or a subgroup from the questionnaire.

The most frequently used method for calculating internal consistency is Cronbach’s coefficient alpha (Saunders et al., 2003, p. 310), which was applied to ensure the level of reliability (see tables 16 to 29 in appendix B). The results for learning style suggest that Activist is equivalent to 0.828, Pragmatist to 0.837,

Reflector to 0.829, and Theorist to 0.838; and for leadership style, Transformational leadership is equivalent to 0.851, Transactional to 0.864, and Laissez-faire to 0.836. Therefore, it was found that the levels of Cronbach's coefficient alpha for both learning and leadership styles are acceptable for an attitude scale.

### **5.8 Validity**

Balnaves and Caputi (2001) propose three main kinds of validity: construct, internal and external validity. Construct validity determines whether the construct of the research is successfully operationalised and represents the phenomena relating to the research objective. In this study, the unit of analysis is the manager of the firm, qualified to provide accurate data based on their knowledge.

Internal validity refers to the extent to which the research design really allows the researcher to draw conclusions about the relationships among variables. In this research, using the quantitative approach, statistical techniques have been applied to test the relationships among variables; in support, Burns (2000) suggests that the standardised test is helpful in forming an important part of the body of necessary information. Hair et al. (2006) recommended that the most common test for normality is Kolmogorov-Smirnov test which determines the level of significance of the differences from a normal distribution. The most commonly used significant level is 0.05. Hence, the organisational effectiveness was tested

for the normality by using Kolmogorov-Smirnov test (see, table 30 in appendix B). The results indicated that the significant level of the sample are greater than 0.05. So, it can be concluded that the sample has a normal distribution. This implies that the sample conforms to acceptable formats.

In contrast to the other types, external validity reflects the degree to which the samples are actually representative of the population from which they were drawn. In this study, the respondents have been stratified based on the location of their firms to ensure that each sample from the different locations had an equal chance of being selected. A probability or random sample technique was then applied to select samples. This means that the samples were randomly selected, contributing further to the generalisability of the data gathered.

In addition, the questionnaire was sent to professional proof readers based in the UK and Thailand in order to check translation from English to Thai and from Thai to English. This was necessary to ensure that the respondents shared the same understanding of the phrases applied in every single question. All respondents were also assured of the highest level of confidentiality of data, which will be used for academic purposes only. Respondents were also notified that a copy of the results would be provided, although no individual companies would be identifiable from the published information.

## **6. Qualitative Approach**

### **6.1 The Semi-Structured Interview**

The semi-structured interview, consisting of questions that the respondents can answer freely (Morse, 1992), helps the researcher to gather participants' responses in breadth and depth. This data is reported as narrative containing direct quotations from interview statements and fieldnotes. It confers a sense of reality, describing accurately what the informants feel, perceive and how they behave (Burns, 2000). In this research, interviews investigated the individual's experience and context, to achieve specific perspectives from respondents. The researcher gave respondents the opportunity to express all related views, supported debate and exploration, and was able to elicit additional information by probing and discussing answers (Morse, 1992). Consequently, this method also allows the researcher to interview the informants comprehensively by following key themes that need to be explored. Further, the researcher asked each respondent the same questions in the same order to ensure that the interview data from one participant could be compared with the responses of others.

### **6.2 Pilot Study**

Because the semi-structured interview is flexible, the researcher has a list of questions or fairly specific topics to be covered, and the pilot study is helpful for

refining the questions, and including new questions based on comments picked up on or given by interviewees. The pilot study makes the interviewer more familiar with the focus of the interview, and able to appreciate what the interviewees see as significant (Bryman, 2004). The pilot study took place in January 2006 (see the pilot-study and follow-up questions in appendix E and F). Two respondents were interviewed in order to refine the questions and also to estimate the length of time per interview. This pilot study raised a few important issues which had not been anticipated, and some of the questions were rephrased to obtain more in-depth information.

Further, it was noted during the pilot study that the interviews lasted over two hours, so the questions were reconstructed to be less time consuming, and more focused and specific.

It may also be observed that interviewees' replies are inconsistent or irrelevant, so the interviewer must bring interviewees back to the topic. Bryman's (2004) strategy that the interviewer should not talk too much, making the interviewee passive, or too little, making the interviewing feeling he or she is not talking along the right lines, was adopted.

### **6.3 Sampling**

The research sample is carefully selected, not necessarily to be representative of the entire population but rather to represent a key aspect of that domain (Gordon,

1999). For a continuous variable, the choices are not so obvious. However, the researcher is well advised to choose sampling from both extreme values, high and low (Gearing, 2007). Covin and Slevin (1988) on the relationship between entrepreneurial behaviour and organisational structure, evolved and validated a tool which uses six statements of managerial process to evaluate the degree to which respondent firms exhibit an entrepreneurial style. They recommended the approach for classifying groups is to select the overall mean for all scale attributes as the dividing point. Hence, the firms in a sample which have a mean overall score equal to or less than the overall sample mean can be classified as being biased towards operating as non-entrepreneurial firms. Those firms which have a mean score greater than the overall sample mean can be classified as being biased towards operating as entrepreneurial firms. Following methods used for classifying samples in previous research, triangulation techniques were employed in the qualitative data analysis of this research. In relation to the organisational effectiveness section in the questionnaire, the results show a mean score of 74; based on this, firms have been classified into two groups: those attaining organisational effectiveness greater and lower than the mean score, i.e. the more effective and less effective firms.

Ritchie and Lewis (2003) suggest that, in general, qualitative samples for a single case study involving individual interviews only, may be below 50. If they are larger than that, they start to become difficult to manage in terms of the quality of data collection and analysis that can be achieved. However, it is also essential to make sure that samples are not too small. The sample size in a qualitative study

must support the study's purpose and generate sufficient data to address the research question posed (Mason, 2002). In addition, the sampling or case should be extreme and deviant; cases are chosen because they are unusual or special and therefore potentially enlightening (Robson, 2002; Patton, 2002). Therefore, the top ten firms of each group were selected; of the twenty managers interviewed, ten respondents were selected from the "more effective" firms and the other ten from the "less effective" firms.

#### **6.4 Data Collection**

The data collection took place from January to April 2006 in different provinces in north-eastern Thailand. Since respondents' firms are located in different provinces, the researcher arranged to drive from site to site in order to cover all the interviews within the time available. Each respondent had limited time for the interview, so the researcher made an appointment one week in advance over the phone. All interview sessions took place in the private office of each respondent within the office hours of 8:00 am to 5:00 pm. Because of the tight schedule of respondents, the interview period lasted from 40 minutes to an hour. Face-to-face conversation and telephone were used to obtain information, beliefs, and opinions from respondents. The interviewer's main responsibilities were to ask the questions in such a way as to obtain valid responses and to record the responses accurately and completely (Burns, 2000). Accordingly, recording and written interpretation were made during the interview to confirm the accuracy of quotes and descriptions. The researcher realised that the records collected

included personal data and private information, so permission for written notes and tape recordings was obtained prior to the interviews.

### **6.5 Inductive-based analytical strategies and procedures**

One of the main aims of this research is to generate a direction for future work; as it is exploratory research, it was useful to adopt an inductive approach to analyse the data. “The use of the inductive approach allows a good ‘fit’ to develop between the social reality of the research participants and the theory that emerges will be grounded in that reality”; the theory’s generalisability may also be tested in other contexts, and the researcher may need to compare the explanations with existing theory (Saunders et al., 2003, p. 393). One of the most common strategies used in qualitative method for analysing data is called data display and analysis. It is composed of three simultaneous processes: data reduction, data display and drawing and verifying conclusions. Data reduction refers to the process of summarising and simplifying data as well as to selectively focusing on some parts of the data, while data display involves organising and assembling the selected data into diagrammatic or visual displays, by matrices or networks. Data in matrices are tabular form, with defined columns and rows; a network is a collection of nodes or boxes linked by lines, each node containing descriptions or labels to suggest key points from the data. Display data are useful for drawing and verifying conclusions, as they help to identify relationships and patterns in the data and make comparisons between

data elements, and to identify any relationships, key themes, patterns and trends that may be evident (Miles and Huberman, 1994).

Baptiste (2001) identifies four interrelated phases in qualitative data analysis: defining the analysis, classifying data, making connections between data elements, and conveying the message. Marshall and Rossman (1999) suggest six general phases of data analysis, irrespective of the approach adopted: organising the data, generating categories, coding data, testing the emerging understanding, searching for alternative explanations, and writing the report. More importantly, it is recognised that the purpose of all approaches used to analyse qualitative data is to concentrate on grouping based on shared themes in order to understand the content of the text in its breadth and depth. Hence, different combinations of methods of analysis were used to analyse the data.

Computer-assisted qualitative analysis also helps the researcher to quickly and easily store the material in one place, and to observe the database line by line, considering the meaning of each sentence and idea (Creswell, 1998). This helps to enhance and constrain the data through the ease of cutting and sorting it (Ritchie and Lewis, 2003). All information was therefore transcribed and stored by NVIVO version 2.0, one of the best known qualitative software programs, which provides a wide variety of tools for managing rich data records and information about them. More specifically, it is useful for browsing and enriching text, coding it visually or into other categories, and annotating and gaining access to data records precisely and quickly (Richards, 1999).

Researchers examine many ways of coding to help them extract meaning from their data (Rubin and Rubin, 1995). Unlike quantitative analysis, there are no clearly agreed rules or procedures for qualitative data analysis. Approaches vary in terms of basic epistemological assumptions about the nature of qualitative enquiry and the status of researchers' accounts (Ritchie and Lewis, 2003). Therefore, a variety of coding techniques were applied for categorising the interview data. The researcher first reviewed all information by looking at the observation field notes and interview transcriptions to obtain a sense of the overall data; this approach is also suggested by Tesch (1990). At a later stage, the researcher summarised the field notes by highlighting certain important information in descriptions. This was followed by the word repetition technique, which enables the researcher to look at keywords in context. Words that occur frequently are seen as being significant in the minds of respondents (Rubin and Rubin, 1995).

Accordingly, in another approach suggested by Creswell (1998), some of the findings were presented in the form of tables and charts to make comparisons between cases. In order to relate the data to the themes, all information was classified and sorted into categories, using sorting and cutting techniques. This is useful for developing categories and reducing the information (Baptiste, 2001; Ryan and Bernard, 2007). Once the researcher had grouped similar descriptions together and related different ideas to one another, the data were grouped in categories to allow comparing and contrasting the interview descriptions, and to organise the themes, concepts, and ideas of each interview category around the

issues of the study. Finally, all data were re-reviewed according to whether they were similar to or different from the core content vis-à-vis the related categories.

## **6.6 Deductive-based analytical strategies and procedures**

The deductive approach could be used as a special technique involving development of an explanation while collecting and analysing data. One of the most commonly used techniques, “explanation building”, is designed to test theoretical propositions in an iterative manner (Yin, 1994). It is composed of six different processes to analyse the data: devising a theoretically based hypothesis or proposition which the researcher will then seek to test; undertaking data collection through an initial case study in order to be able to compare the findings with the theoretically based proposition; amending the theoretically based proposition in the light of the findings from the initial case study; undertaking a further round of data collection in order to compare the findings from this in relation to the revised proposition; further amending this revised proposition in the light of the findings from this second case study; and undertaking further iterations of this process until a satisfactory explanation is derived (Saunders et al., 2003, p. 392). It is also useful to apply the quantitative method to cross check the findings of the qualitative one (Bryman, 2006).

Hence, the quantitative technique was applied. After the themes were carefully drawn from the data, the statistical technique known as “independent sample t-

test” was used to test the relationship among variables which affect the organisational effectiveness of each firm.

## **6.7 Reliability**

How reliable, accurate and precise the research tools or instruments are is in turn judged by the consistency with which known instruments produce certain “measurement” (Mason, 1997, p. 145). The technical quality of recording is a decisive issue. Crucial aspects of quality include the sound quality and location of the microphone (Perakyla, 2004, p. 288). In this study, a tape recorder was used to record the conversation, in the private office of the respondents, so the quality of sound is comparatively clear. Furthermore, during the interview, the researcher had to check the consistency of the answers, so the same topic was rephrased and repeated to ensure reliability. Last, member checking comprises the researcher’s restating, summarising or paraphrasing the information received from the respondent, to ensure that what was heard or written down is in fact correct. Following data collection, member checking consists of reporting back preliminary findings to respondents, and asking for critical commentary on the findings (Kuzel and Like, 1991). Accordingly, these approaches were used to increase the reliability of research findings.

## 6.8 Validity

The most obvious type of validity is content validity of the questions, which may be assessed by having some competent colleagues examine the items to judge whether they are adequate for measuring what they are supposed to measure, and whether they are a representative sample of the behaviour domain under investigation (Burns, 2000). From the beginning of the research, throughout the process of generating questions, the supervisors, specialists in this research field, provided crucial suggestions and recommendations to maintain and enhance the content validity of the questions. In order to try to maintain the anonymity that the researcher promised the respondents, the respondents were informed that this interview would be devoted entirely to educational purposes, firms' names would not be revealed and the interviews would be kept confidential. The respondents were also notified that they could withdraw at any stage of the interview session.

Naturalistic observation is usually confined to a relatively small number of cases for reasons of economy, and by definition, requires that an observer be present at the scene of events. These characteristics of the technique are a potential source of error (Brewer and Hunter, 1989, p. 161), and the samples must be selected carefully. Populations of cases must be similar to each other in whatsoever respects may influence the informal relationship that the researcher is considering, or such differences must be controlled (Gearing, 2004). The sample was homogeneous because all respondents are managers in the same business area. At the same time, the sample firms should be widely different from each

other to identify central themes which divide the variety of cases or people (Holloway and Wheeler, 1996; Patton, 2002; Robson, 2002). Consequently, the sample was heterogeneous or of maximum variation because the interviewees selected were of a variety of demographic types, including age, gender, educational level and length of experience. Last, to ensure the internal validity, the qualitative method could help to cross-check the quantitative findings (Bryman, 2006; Kelly, 1999). However, although the combination of quantitative and qualitative approaches, perhaps in a multi-method approach, may resolve some of the difficulties, it is not automatically a resolution of all methodological difficulties (May, 2001). Hence, to improve the validity of this research both qualitative and quantitative methods were used to cross check the findings.

## **7. Conclusion**

This chapter presents the research objectives, research methodology, research methods and the design framework underlying this specific study. The advantages and disadvantages of quantitative and qualitative techniques were highlighted to show awareness of the methods' respective strengths and limitations as used in this research. For example, the quantitative approach was applied for generalising the samples, and a qualitative approach to acquire in-depth and richer information. A questionnaire was used as a quantitative tool, and semi-structured interviews as a qualitative tool. A triangulation technique was applied to cross check and support the findings from both approaches.

Finally, the reliability and validity of both quantitative and qualitative methods have been revealed to verify the level of trustworthiness of this research. Cronbach's coefficient alpha was used to check the reliability of the questions in the questionnaire. The quality of the interview session was explained, and the member checking technique was used to ensure the reliability of the qualitative approach. Additionally, copies of the interview results were sent to the interviewees to ensure reliability of the research findings. With regards to the validity of the data collected, construct, internal and external validity were considered. To further support the validity of the qualitative approach employed by the researcher, the supervisors, specialists in this research field, provided some critically important suggestions and recommendations to maintain and enhance the validity of the question content. The samples were homogeneous and heterogeneous, and able to provide in-depth information.

The following chapter presents the data using descriptive statistics in the form of tables, charts and diagrams.

# CHAPTER 4 DESCRIPTIVE STATISTICS

## 1. Introduction

Describes the data, using descriptive statistics, the subsequent data analysis is reported in chapter 5. The Statistical Package for Social Science software (SPSS) was used to analyse the results of our survey. Descriptive statistics were used to classify the variables, described in the following sections: Learning Styles, Leadership Styles, Organisational Effectiveness and Demographics of Respondents.

## 2. Learning Styles

Learning Style is composed of 20 Likert's scale questions, with five questions in each learning category designed to identify the respondents' attitude:

- Activist = question numbers 2, 3, 4, 5, and 16
- Pragmatist = question numbers 7, 8, 9, 10, and 17
- Reflector = question numbers 12, 13, 14, 15, and 18
- Theorist = question numbers 1, 6, 11, 19, and 20

Table 3 reports the responses.

**Table 3: Responses to questions on ‘learning styles’**

| Learning Style  | Agree         | Disagree       |
|---|---------------|----------------|
| 1. I am keen on basic assumptions, principles, theories, models and systems thinking.                       | 68<br>(48.6%) | 72<br>(51.4%)  |
| 2. I tend to act first and consider the consequences later.   | 72<br>(51.5%) | 68<br>(48.5%)  |
| 3. I like to try anything that is challenging.  | 81<br>(57.9%) | 59<br>(42.1%)  |
| 4. I prefer to find solutions to problems by brainstorming.   | 69<br>(49.3%) | 71<br>(50.7%)  |
| 5. I am optimistic about anything new and therefore unlikely to resist change.                              | 86<br>(61.5%) | 54<br>(38.5%)  |
| 6. I like to analyse and study situations beforehand.   | 48<br>(34.2%) | 92<br>(65.8%)  |
| 7. I like to seek new ideas and take the first opportunity to experiment with applications.                 | 53<br>(37.9%) | 87<br>(62.1%)  |
| 8. I like to get on with things and act quickly and confidently on ideas that are interesting.              | 36<br>(25.7%) | 104<br>(74.3%) |
| 9. I tend to be impatient with ruminating and open-ended discussion.  | 59<br>(42.1%) | 81<br>(57.9%)  |
| 10. I am essentially practical in my approach to problem solving.   | 43<br>(30.7%) | 97<br>(69.3%)  |
| 11. I approach problem solving in a step by step, rational and logical manner                               | 75<br>(53.5%) | 65<br>(46.5%)  |
| 12. I tend to be a thoughtful, thorough and methodical person.  | 79<br>(56.5%) | 61<br>(43.5%)  |
| 13. I like to analyse matters by analysing experiences and observing them from many different perspectives. | 52<br>(37.2%) | 88<br>(62.8%)  |
| 14. Before making any decision I tend to consider all possible angles and implications.                     | 79<br>(56.4%) | 61<br>(43.6%)  |
| 15. I work well under pressure and a tight deadline.  | 62<br>(44.3%) | 78<br>(55.7%)  |
| 16. I enjoy learning new things and practices.  | 64<br>(45.7%) | 76<br>(54.4%)  |
| 17. I like to try out ideas, theories and techniques to see if they work in practice.                       | 53<br>(37.9%) | 87<br>(62.1%)  |
| 18. I like to listen to others and get the drift of the discussion before making my own points.             | 72<br>(51.5%) | 68<br>(48.6%)  |
| 19. I like to complete tasks in such a way that they fit into a rational scheme.                            | 54<br>(38.6%) | 86<br>(61.4%)  |
| 20. I prefer to find out the causes of problems before deciding the best way to solve them.                 | 69<br>(49.2%) | 71<br>(50.7%)  |

As can be seen from Table 3, the majority of respondents, 86 or 61.5 per cent, agreed with the statement of question number 5, “I am optimistic about anything new and therefore unlikely to resist change”. 81 respondents or 57.9 per cent agreed with the statement of question number 3, “I like to try anything that is challenging”. A minority of respondents, 36 or 25.7 per cent, agreed with question number 8, “I like to get on with things and act quickly and confidently on ideas that are interesting”.

### **3. Leadership Styles**

This section of questionnaire was developed to specify respondents’ leadership styles.

- Transformational leadership = question numbers 21, 22, 23, 24, 28, 29, 30, 31, 35, 36, 37, 38
- Transactional leadership = question numbers 25, 26, 32, 33, 39, 40
- Laissez-faire leadership = question numbers 27, 34, 41

Table 4 reports the responses.

**Table 4: Responses to questions on ‘leadership styles’**

| Leadership Style  | Always        | Never          |
|---|---------------|----------------|
| 21. I like to make others feel good.  | 54<br>(38.6%) | 86<br>(61.4%)  |
| 22. I would prefer to communicate using uncomplicated language.   | 54<br>(38.6%) | 86<br>(61.4%)  |
| 23. I tend to persuade others to think of new ways to solve problems.                                   | 58<br>(41.4%) | 82<br>(58.6%)  |
| 24. I usually help others to develop themselves.  | 55<br>(39.3%) | 85<br>(60.7%)  |
| 25. I prefer to let others know exactly what they should do in order to achieve their goals.            | 56<br>(40.7%) | 83<br>(59.3%)  |
| 26. I am satisfied when I perceive that others have performed well.                                     | 61<br>(43.5%) | 79<br>(56.5%)  |
| 27. I would let others do their work in the way they think best.  | 8<br>(5.7%)   | 132<br>(94.3%) |
| 28. Others tend to have a lot of respect for me.  | 61<br>(43.5%) | 79<br>(56.4%)  |
| 29. I make others feel that they can accomplish their assigned tasks.                                   | 58<br>(41.5%) | 82<br>(58.5%)  |
| 30. I usually provide others with new ideas to solve tough problems.                                    | 57<br>(40.7%) | 83<br>(59.3%)  |
| 31. I provide feedback when others are performing their assigned tasks.                                 | 58<br>(41.4%) | 82<br>(58.6%)  |
| 32. I reward others and make them feel appreciated when they have completed assigned tasks.             | 60<br>(42.8%) | 80<br>(57.2%)  |
| 33. As long as the tasks have been accomplished, I will not make any changes to the working method.     | 68<br>(48.5%) | 72<br>(51.5%)  |
| 34. I tend to support whatsoever method others have decided to employ in order to complete their tasks. | 9<br>(6.5%)   | 131<br>(93.5%) |
| 35. Others feel that I am pleasant to work with.  | 56<br>(40.0%) | 84<br>(60.0%)  |
| 36. I help others find ways to accomplish their assigned tasks.   | 61<br>(43.5%) | 79<br>(56.5%)  |
| 37. I tend to encourage others to think in different and unconventional ways.                           | 59<br>(42.1%) | 81<br>(57.9%)  |
| 38. I am aware and try to pay special attention to others who have been isolated from the workplace.    | 66<br>(47.1%) | 74<br>(52.9%)  |
| 39. I usually reward others after their assigned tasks have been accomplished.                          | 64<br>(45.7%) | 76<br>(54.3%)  |
| 40. I provide others with standard approaches to accomplish their assigned tasks.                       | 71<br>(50.7%) | 69<br>(49.3%)  |
| 41. I prefer not to ask anything from others unless it is necessary.                                    | 8<br>(5.7%)   | 132<br>(94.3%) |

As can be seen from Table 4, the majority of respondents, 71 respondents or 50.7 per cent agree with the statement of question number 40 “I provide others with standard approaches to accomplish their assigned tasks”. Followed by 68 respondents or 48.5 per cent agree with the statement of question number 33 “As long as the tasks have been accomplished, I will not make any changes to the working method”. The minority of respondents, 8 respondents or 5.7 per cent agree with the statement of question number 27 “I would let others do their work in the way they think best”.

#### **4. Organisational Effectiveness**

This section of the questionnaire was designed to measure the organisational effectiveness of each firm. Our results showed a mean of 74. Therefore, firms were divided into two groups: those attaining a score of 74 or less (Less Effective) and those with more than 74 (More Effective).

**Figure 6: Organisational Effectiveness**

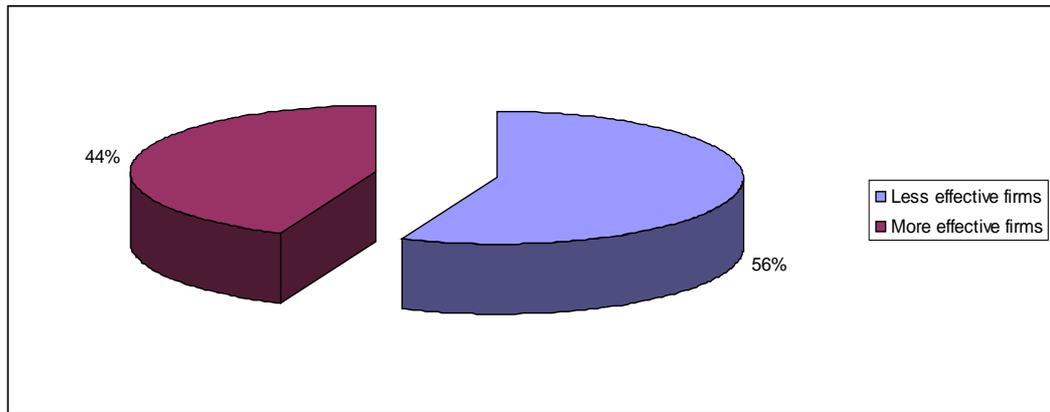


Figure 6 illustrates that the majority of firms fall into the category of Less Effective, representing 56 per cent of the sample population.

## 5. Demographics of Respondents

In this section, the frequency and percentage of responses to demographic questions were utilised (see table 5).

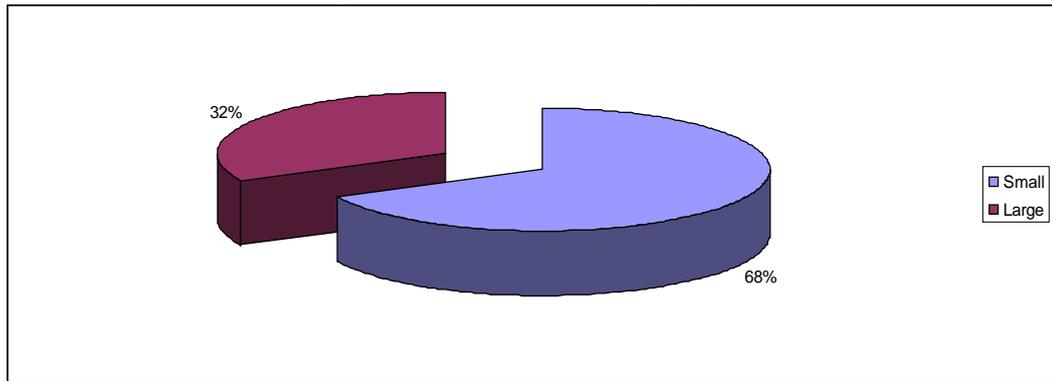
**Table 5: Demographics of Respondents (n=140)**

| Demographic of Respondents |   |           |            |
|----------------------------|---|-----------|------------|
|                            |   | Frequency | Percentage |
| Number of Employees        | 8 employees and less (Small)                                    | 95        | 68         |
|                            | More than 8 employees and above (Large)                         | 45        | 32         |
| Gender                     | Male  | 93        | 66         |
|                            | Female  | 47        | 34         |
| Age                        | 40 years old and less (Young)                                   | 48        | 34         |
|                            | More than 40 years old but less than 54 years old (Middle aged) | 43        | 31         |
|                            | 54 years old and above (Old)                                    | 49        | 35         |
| Education                  | Elementary School   | 33        | 23         |
|                            | Junior High School  | 23        | 16         |
|                            | Senior High School/ Vocational School                           | 33        | 24         |
|                            | College Diploma/ Higher Vocational School                       | 32        | 23         |
|                            | Bachelor's Degree   | 15        | 11         |
|                            | Master's Degree   | 4         | 3          |
|                            | Ph.D.   | 0         | 0          |
| Experience                 | Others  | 0         | 0          |
|                            | 6 years and less (Short)  | 50        | 36         |
|                            | More than 6 years but less than 16 Years (Medium)               | 44        | 31         |
|                            | 16 years and more (Long)  | 46        | 33         |

Our results showed the mean of 8 employees. Therefore, the number of employees can be classified into 2 groups which are:

1. 8 employees and less (Small)
2. More than 8 employees (Large)

**Figure 7: Number of Employees**



As illustrated in figure 7, the majority of the firms (68%) consist of 8 employees and less (defined as ‘small firms’). The rest of the sample comprise group of firms with more than 8 employees (thus defined as ‘large firms’) which represents 32 percent overall.

**Figure 8: Gender**

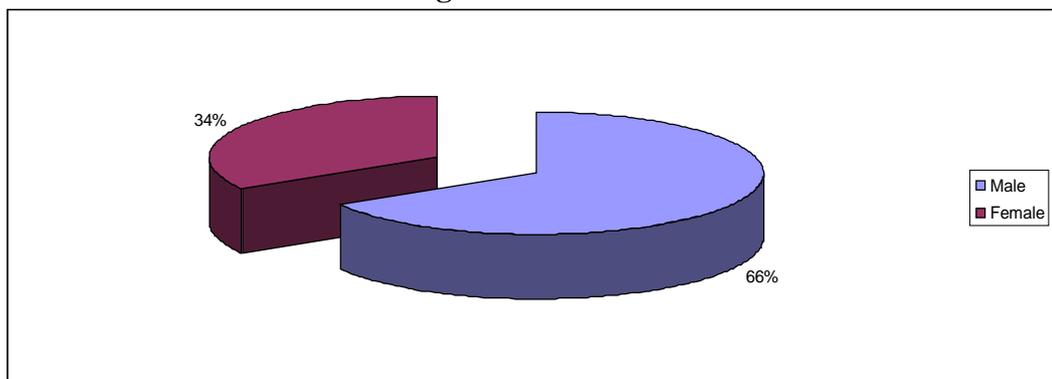


Figure 8 illustrates that the majority of the respondents fall into the category of male- representing 66 per cent of the sample population.

Respondent’s ages were classified into 3 groups based on the percentile 33.33 and 66.66

1. A group of respondents whose age is 40 years old and less (Young)

2. A group of respondents whose age is older than 40 years old but less than 54 years old (Middle aged)
3. A group of respondents whose age is 54 years old and above (Old)

**Figure 9: Age**

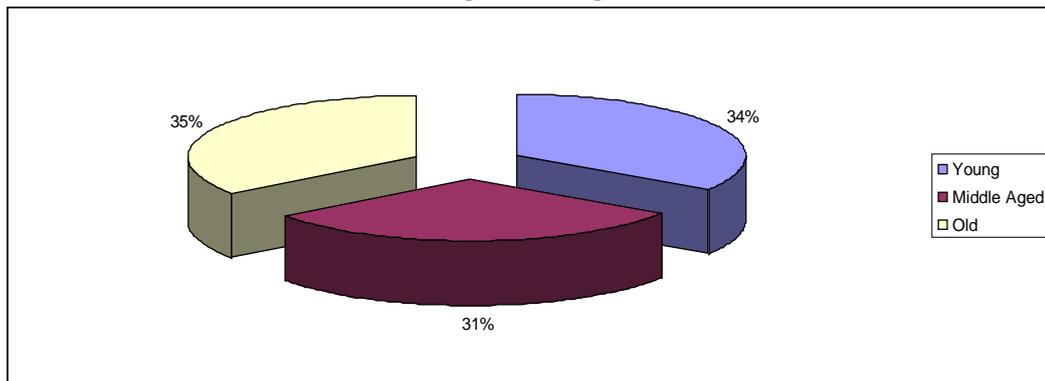


Figure 9 illustrates that the largest group of respondents are aged 54 years old and above (Old) representing 35 percent of the whole sample population. This figure is followed by respondents aged 40 years old and less (Young) which accounts for 34 percent. The smallest age group in the sample is of ages above 40 years old and under 54 years old (Middle aged) representing 31 percent of the population.

**Figure 10: Education**

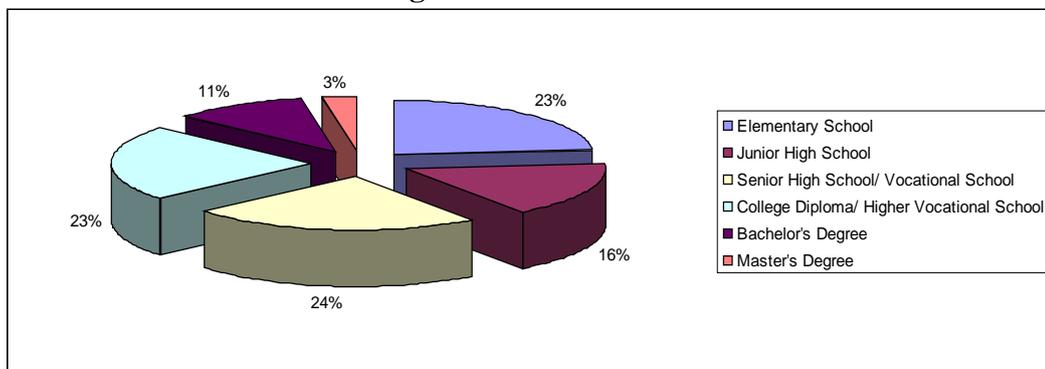


Figure 10 illustrates that the largest group of respondents completed Senior High School/ Vocational School representing 24 per cent. The second group of

respondents finished Elementary School and College Diploma/ Higher Vocational School representing 23 per cent. And 16 per cent of the respondents completed junior high school. Furthermore, 11 per cent of respondents finished bachelor's degree and the last group is 3 per cent completed master's degree.

Our results showed percentiles 33.33 and 66.66 representing 6 and 16 years respectively, so experience was classified into 3 groups:

1. A group of leaders whose experience lengths is 6 years and less (Short)
2. A group of leaders whose experience lengths is more than 6 years but less than 16 years (Medium)
3. A group of leaders whose experience lengths is 16 years and more (Long)

**Figure 11: Experience**

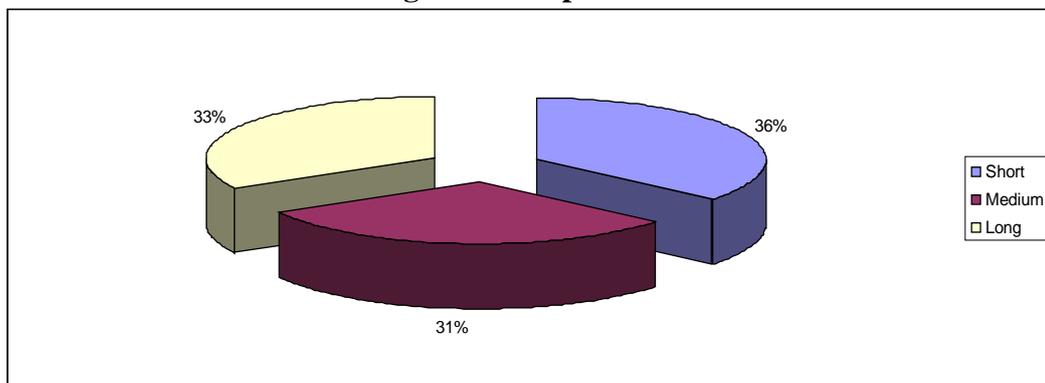


Figure 11 illustrates that the largest group of respondent have experience length in the group of 6 years and less (Short) representing 36 per cent. This was followed by the group of respondents whose experience length is more than 6 years but less than 16 years (Medium) representing 31 per cent. Last, the group

of respondents whose experience length is 16 years and more representing 33 per cent.

**Table 6: Mean and Standard Deviation (N=140)**

| Variables           | Mean  | Standard Deviation |
|---------------------|-------|--------------------|
| Number of Employees | 7.57  | 11.102             |
| Experience          | 12.78 | 9.687              |
| Age                 | 47.03 | 12.141             |

Table 6 demonstrated mean and standard deviation of key variables, Number of Employees, Experience and Age, suggesting that mean and standard deviation of Number of Employees are 7.57 and 11.102. This is followed by mean and standard deviation of Experience at 12.78 and 9.687, and finally Age at 47.03 and 12.141.

## **6. Conclusion**

This section has reported the results from applying SPSS to the data. Each variable was described by percentage and frequency of occurrence. Finally, tables and pie charts illustrated the figures. Next, different statistical methods were utilised in order to perform the data analysis, as reported and discussed in the following chapter.

# **CHAPTER 5 QUANTITATIVE DATA ANALYSIS**

## **1. Introduction**

This chapter presents the results from our survey of the managers in the small firms and our analysis of the primary data using SPSS. The variables are Number of Employees, Gender, Age, Levels of Education and Length of Experience, Learning Styles, Leadership Styles and Organisational Effectiveness. A variety of statistical methods were applied to test the hypothesis: Independent Samples T-Test, One-Way ANOVA, Correlation and Multiple Regression Analysis. The chapter therefore describes the research findings and the statistical analysis of the collected data; it tests the research hypotheses and finally discusses the results.

## **2. Hypothesis**

A statistical hypothesis is a statement about one or more parameters of population distribution that requires verification (Kirk, 1997), and which can estimate the relationship between variables (Kerlinger, 2000). In particular, it indicated whether the relationship between variables is statistically significant. In this section, the main hypotheses have therefore been tested to identify the relationships between independent and dependent variables.

### **3. Independent Sample T-Test and Analysis of Variance**

#### **(ANOVA)**

The independent sample T-Test is used to compare the differences of group mean on two independent variables (Auamnoy, 2002). It assesses the statistical significance of the difference between two independent sample means for a single dependent variable (Hair et al., 2005). In this case, the independent variable is gender (group 1 = male manager and group 2 = female manager) and the dependent variables are Learning and Leadership Styles and Organisational Effectiveness.

The Analysis of Variance (ANOVA) statistical technique is used to determine whether samples from two or more groups come from populations with equal means (i.e. do the group means differ significantly?). If the group means do not differ significantly then it is assumed that the independent variables do not have an effect on the dependent variable (Lindman, 1992). If the results from the F test show that, overall, the independent variables are related to the dependent variable, then multiple comparison tests of significance are used to explore the relationships. In order to decide which method is appropriate to verify the mean difference, it is essential to test the homogeneity of variances which is the equal variance across samples (Andrew, 2001). In this research the Tukey HSD and Dunnett T3 tests have been used to verify whether the variances of samples are equal. If variances across samples are equal, the Tukey HSD test is used to

explain the mean difference; if they are not equal, the Dunnett T3 test is used to verify the mean difference (Auamnoy, 2002).

In this case, the independent variables are the number of employees in the firm, and the demographics of the respondent. The number of employees was distinguished as Small (8 employees or fewer) and Large (more than 8 employees). Gender, obviously was male or female. Age was categorised into 3 groups: Young ( $\leq 40$ ); Middle aged (41-53); and Old ( $\geq 54$ ). Experience was also categorised in 3 groups:  $\leq 6$  years; 7-15 years; and  $\geq 16$  years. There are 6 levels of education, the highest reached being: Elementary School, Junior High School, Senior High School/Vocational School, College Diploma/Higher Vocational School, Bachelor's Degree, or Master's Degree. In addition, the dependent variables are composed of Learning styles, Leadership styles and Organisational Effectiveness.

#### **4. Multiple Regression Analysis**

Multiple regression is one of the most recognised and widely used methods of quantitative study (Hardy, 1993). A typical regression model attempts to explain variation as a quantitative dependent variable or Y, by mapping the relationship of Y to a specified set of independent variables as an additive, linear function. Observing the least squares estimation techniques could help in understanding a prediction equation and allows us to estimate conditional means on the dependent variable-expected values of Y. Special combinations of values are

assessable as quantitative variables for which it can be supposed that there are equal intervals relative to an arbitrary zero point; the number of feasible predicted values for Y is unlimited. In addition, when both dependent and independent variables are quantitative variables, the set of relationships can be captured geometrically.

Hierarchical multiple regression is an extension of linear regression (Raudenbush and Bryk, 2002). This is used when one is interested in the linear relationship between a set of independent variables and one dependent variable. In multiple regression, the independent variables are occasionally referred to as predictor variables and the dependent variables are referred to as the criterion variable. Multiple regression analysis has traditionally been identified as appropriate for interval or ratio scales (Cohen et al., 2003; Saunders, 1956). It is the preferred statistical method for identifying interaction effects. Most applications engage random-effects designs in field settings where surveys are utilised to determine individual and organisational characteristics of interest. As a result, the independent and dependent variables in this study are ratio scale and are appropriate for application with the Multiple Regression Analysis method.

Linderman et al. (1980) suggest that it is necessary to have at least a sample size of 100 in order to apply multiple regression effectively; and Hair et al. (2006) suggest a ratio of 5:1 as the standard to achieve to ensure that the data collected would be adequate to reflect the phenomenon being studied. More specifically, taking into account all the independent variables, a sample that is at least one-

fifth of the target population size is required. Thus, the high response rate could further contribute to the representativeness of the data collected. In this study, 12 independent variables were analysed, i.e. Number of Employees, Gender, Age, Experience, Education; Activist, Pragmatist, Reflector and Theorist learning styles; and Transformational, Transactional and Laissez-faire leadership styles. Therefore, the minimum sample size required is estimated to be at least 60. In this research there are 140 cases or respondents, so it is clear that the research sample is sufficient to apply the multiple regression analysis.

A sequential or hierarchical analysis of a set of independent variables may often produce the coefficients necessary to answer the scientific questions at hand. In the hierarchical form, the set of independent variables are entered cumulatively in the  $R^2$  and partial regression and correlation coefficients are determined when each independent variable joins the others (Todman and Dugard, 2006). A full hierarchical procedure for a set of independent variables consists of a series of regression analyses, each with one more variable than its predecessor. The choice of a particular cumulative sequence of independent variables is made in advance, as emphasised by the purpose of the research. Moreover, the researcher should be guided by the theoretical foundation that originally led to the research question (Kerr et al., 2002). The higher the correlation between the independent and dependent variable, the better prediction equation they could provide (Steven, 1996). This research framework has three main groups of independent variables: Respondents' Profile and Number of Employees; Learning Styles; and Leadership Styles. As a result, the relationship between independent and

dependent variables have been tested to attain the results precisely, and hierarchical regression analysis has been applied.

#### **4.1 Multicollinearity**

Multicollinearity may have some adverse effects on estimated coefficients in a multiple regression analysis. Thus, it is important that researchers are prepared to identify its existence. High correlation between each pair of independent variables could suggest an underlying collinearity problem. The Pearson's correlation among independent variables or predictors should not exceed 0.8; otherwise the independent variables that show a relationship at or in excess of 0.80 may be suspected of exhibiting multicollinearity (Bryman, 2006). When two regressors or X, independent variables, are very closely related; it is difficult to "untangle" their separate effects on Y (Wonnacott and Wonnacott, 1990). Furthermore, another approach, still based on the matrix of correlations, is called the Variance Inflation Factor (VIF) which provides an index of the amount that the variance of each regression coefficient increased relative to a situation in which all of the predictor variables are uncorrelated (Cohen et al., 2003). Some statistical packages, including SPSS, present the tolerance (Gunst and Mason, 1980). Instead of VIF, the tolerance may be its reciprocal. Hair et al. (2006) suggest that if VIF equals 1.0, i.e. tolerance is 1.0, then there is no multicollinearity in this condition. To avoid the multicollinearity problem, VIF should not exceed a value of 10. However, particularly when the sample size is smaller, the researcher may wish to be more restrictive because of increases in

standard errors due to the multicollinearity. With a VIF threshold of 10, this tolerance would correspond to standard error being “inflated” more than three times ( $\sqrt{10} = 3.16$ ) to what it would be with no multicollinearity (Hair et al., 2006, p. 230).

$$\text{VIF} = \frac{1}{\text{Tolerance}} = \frac{1}{(1 - R_{xi}^2)}$$

Where:

$R^2$  = Coefficient of Determination

X = Independent Variables

The condition index is the correlation matrix of the independent variables, which may be decomposed into a set of orthogonal dimensions (Cohen et al., 2003). Orthogonal dimensions are completely non-overlapping and have no variance in common. Traditionally, major statistics programs will perform this decomposition, which is recognised as principal components analysis. Normally, the multicollinearity could be observed by looking at both condition index and variance proportions. A rule of thumb has been suggested that a value of the condition index of 30 or greater and variance proportions greater than 0.90 emphasise severe problems of multicollinearity (Hinton et al., 2004). Nevertheless, the values of condition index and variance proportions have been considered smaller than traditional rule-of-thumb guidelines such as VIF.

Thus, it is essential to scrutinise the significant-level relationship among independent variables. To detect problems of multicollinearity, the coefficient correlation of each pair of independent variables has been observed (see appendix G, Table 31 Coefficient Correlation). It was found that the coefficient correlation of the set of independent variables did not exceed 0.80. In addition, the condition index and variance proposition were tested for multicollinearity (see appendix G, Table 32 Collinearity Diagnostics). It was found that the condition index is 33.75 but the variance proposition of each pair of independent variables did not exceed 0.90. Furthermore, tolerance and VIF were tested for the multicollinearity problem (see appendix G, Table 33 Collinearity Statistics); it was found that the tolerance of each predictor was not lower than 0.100 and the VIF did not exceed 3.16 (the limit suggested by Hair et al. 2006). According to Hair et al.'s (2006) guidelines, multicollinearity does not appear to be present. Nevertheless, given the size and cross-sectional nature of the data, multicollinearity and its implications for the interpretation of the results, cannot be ruled out completely.

#### **4.2 Dummy Variable**

The coding of categorical data requires the development of mutually exclusive and exhaustive categories (Tabachnick and Fidell, 2007). Categorical variables can be dichotomous, using binary (0, 1) coding; dummy variables are always dichotomous. All respondents who are members of a particular category are assigned a code of 1; respondents not in that particular category receive a code of

0. Following this coding convention, the researcher constructs a set of dummy variables for a given categorisation so that any particular respondent is coded 1 on one and only one dummy variable in the set. In this research, the gender of respondents is a categorical variable and is recoded with male as 0 and female as 1.

### **4.3 Results**

Rather than looking for a statistical solution, the researcher should be guided by the theoretical foundations that originally led to the research question (Kerr et al., 2002). This suggests that the researcher select the most appropriate independent variables to predict a dependent variable. Therefore, in this section, hierarchical regression analysis is performed to examine the direct effects of Number of Employees, Demographics of Respondents, Learning Styles and Leadership Styles on the dependent variable known as Organisational Effectiveness. In accordance with the theoretical framework of this research, Number of Employees and a set of Demographics of Respondents (Age, Gender, Education, and Experience) were initially entered, followed by learning styles (Activist, Pragmatist, Reflector, and Theorist) and, finally, Leadership styles (Transformational, Transactional, and Laissez-faire Leadership). Three hierarchical regression analyses were required to test for Organisational Effectiveness.

**Table 7: Model Summary (Number of Employees and Demographics of Respondents, Learning Styles, Leadership Styles)**

| Model predictors   | Sig   | R <sup>2</sup> | Change in R <sup>2</sup> |
|--|-------|----------------|--------------------------|
| Model 1. Number of Employees, Age, Experience, Gender, Education                           | 0.000 | 0.217          | 0.217                    |
| Model 2. + Activist, Pragmatist, Reflector, Theorist                                       | 0.000 | 0.708          | 0.491                    |
| Model 3. + Transactional Leadership, Transformational Leadership, Laissez-faire Leadership | 0.000 | 0.800          | 0.092                    |

Dependent Variable: Organisational Effectiveness

Table 7 above showed that Model 1, with Number of Employees, Age, Experience, Gender, and Education as independent variables, has  $R^2 = 0.217$ . This means that those independent variables could explain the dependent variable Organisational Effectiveness approximately 21.7%. After some independent variables are added to Model 2,  $R^2$  increases to 0.708. Model 3 clearly shows that once the Leadership Styles are added,  $R^2$  increases to 0.800. In addition, Hair et al. (2006) recommend that  $R^2$  is the best standard to use when comparing regression models. Therefore, it can be concluded that the set of independent variables in Model 3 is the most valuable in predicting the dependent variable.

Moreover, the result of the  $R^2$  change in Model 2 suggests that entering a set of Learning Styles could help explain the variance of the dependent variable, approximately 0.491 or 49.1 per cent, more precisely; and it is also clear that a set of Learning Styles greatly affects the variance of Organisational Effectiveness. In Model 3,  $R^2$  change = 0.092 or 9.2 percent, so it could be concluded that a set of Learning Styles is a more powerful influence on Organisational Effectiveness than a set of Leadership Styles.

#### **4.4 Hypothesis 1: Impact of Number of Employees, Demographics of Respondents, Learning Styles and Leadership Styles on Organisational Effectiveness**

$H_0: \beta_1 = \beta_2 \dots = \beta_k = 0$ , there is no significant linear relationship between the set of predictors composed of Number of Employees and Demographics of Respondents, Learning Styles, Leadership Styles and the dependent variable, Organisational Effectiveness.

$H_1: \beta_i \neq 0, i = 1, 2 \dots k$ , there is significant linear relationship between the set of predictors composed of Backgrounds, Learning Styles, Leadership Styles and the dependent variable, Organisational Effectiveness.

To test the hypothesis, Model 3 has been considered because it has the highest value of  $R^2$ , 0.800, which means there is an approximately 80% possibility that the independent variables in this model could explain the dependent variable. The results of ANOVA suggest that the P value is equal to 0.000 which is less than 0.05; therefore, the null hypothesis is rejected. It could be concluded that Number of Employees and Demographics of Respondents, Learning Styles, and Leadership Styles impact on Organisational Effectiveness. Once a set of independent variables impacts on the dependent variable, the prediction equation can be ascertained.

#### 4.4.1 The General Linear Model

$$Y = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8 + b_9 X_9 + b_{10} X_{10} + b_{11} X_{11} + b_{12} X_{12}$$

Where:

$b_0$  = Constant

$X_1$  = Number of Employees

$X_2$  = Age

$X_3$  = Experience

$X_4$  = Gender

$X_5$  = Education

$X_6$  = Activist

$X_7$  = Pragmatist

$X_8$  = Reflector

$X_9$  = Theorist

$X_{10}$  = Transformational Leadership

$X_{11}$  = Transactional Leadership

$X_{12}$  = Laissez-faire Leadership

$Y$  = Organisational Effectiveness

**Table 8: Coefficient (Number of Employees and Demographics of Respondents, Learning Styles, Leadership Styles)**

| Variables                   | Unstandardised Coefficients | Standardised Coefficients |
|-----------------------------|-----------------------------|---------------------------|
|                             | B                           | Beta                      |
| (Constant)                  | 65.919                      |                           |
| Number of Employees         | 0.045                       | 0.056                     |
| Age                         | 0.022                       | 0.030                     |
| Gender                      | -0.057                      | -0.003                    |
| Education                   | 0.060                       | 0.024                     |
| Experience                  | 0.002                       | 0.002                     |
| Activist                    | -0.455                      | -0.386                    |
| Pragmatist                  | 0.296                       | 0.200                     |
| Reflector                   | 0.297                       | 0.266                     |
| Theorist                    | -0.207                      | -0.175                    |
| Transformational Leadership | 1.229                       | 0.336                     |
| Transactional Leadership    | 0.155                       | 0.054                     |
| Laissez-faire Leadership    | -0.606                      | -0.123                    |

Dependent Variable: Organisational Effectiveness

Table 8 above, the prediction equation can be drawn as:

$$\text{Organisational Effectiveness} = 65.919 + 0.045 (\text{Number of Employees}) + 0.022 (\text{Age}) - 0.057 (\text{Gender}) + 0.060 (\text{Education}) + 0.002 (\text{Experience}) - 0.455 (\text{Activist}) + 0.296 (\text{Pragmatist}) + 0.297 (\text{Reflector}) - 0.207 (\text{Theorist}) + 1.229 (\text{Transformational Leadership}) + 0.155 (\text{Transactional Leadership}) - 0.606 (\text{Laissez-faire Leadership})$$

From the prediction equation, it suggests that:

**Number of Employees:** The coefficient value of Number of Employees is 0.045, suggesting that it has a positive relationship with Organisational Effectiveness. It could be concluded that the higher the number of employees, the better they perform.

**Age:** The coefficient value of Age is 0.022, suggesting that it has a positive relationship with Organisational Effectiveness. It could be concluded that the older the employees, the better they perform.

**Gender:** The coefficient value of Gender is -0.057. As Male was re-coded as 0 and Female as 1, it could be supposed that Male managers tend to manage firms more effectively. However, compared to other variables, the statistical tests also indicated that gender is a largely irrelevant variable vis-à-vis organisational effectiveness.

**Education:** The coefficient value of Education is 0.060, suggesting that it has a positive relationship with Organisational Effectiveness. It could be concluded that the higher levels of education the managers have, the better they perform.

**Experience:** The coefficient value of Experience is 0.002, suggesting that Experience has a positive relationship with Organisational Effectiveness. It could be supposed that the longer length of managers' experience, the better they perform.

**Learning Styles:** The results suggest that Reflector has the highest coefficient value, 0.297. This shows that Reflector has a positive relationship with Organisational Effectiveness, and it could be supposed that the higher the level of Reflector, the better the manager performs. Next, the coefficient value of

Pragmatist is 0.296, and it could be said that the Pragmatist is supportive to the firm. On the other hand, the coefficient values of Theorist and Activist are negative, -0.207 and -0.455 respectively. This suggests that both Theorist and Activist have a negative relationship with Organisational Effectiveness. It could be concluded that Theorist and Activist learning styles are not likely to be supportive to the firm.

**Leadership Styles:** According to the prediction equation, Transformational Leadership has the highest coefficient, 1.229; Transactional Leadership is 0.155, and Laissez-faire Leadership -0.606. Therefore, managers who have a high level of Transformational Leadership appear to be more supportive in managing the firm. The coefficient value of Transactional Leadership is also positive, suggesting a supportive style. However, Laissez-faire Leadership has a negative relationship with Organisational Effectiveness, and it could be concluded that this style is not useful to the firm.

#### 4.4.2 Beta Coefficient

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12}$$

$$\begin{aligned} \text{Organisational Effectiveness} = & 0.056 (\text{Number of Employees}) + 0.030 (\text{Age}) - \\ & 0.057 (\text{Gender}) + 0.024 (\text{Education}) + 0.002 (\text{Experience}) - 0.386 (\text{Activist}) + \\ & 0.200 (\text{Pragmatist}) + 0.266 (\text{Reflector}) - 0.175 (\text{Theorist}) + 0.336 \\ & (\text{Transformational Leadership}) + 0.054 (\text{Transactional Leadership}) - 0.123 \\ & (\text{Laissez-faire Leadership}) \end{aligned}$$

The coefficient beta ( $\beta$ ) assists in determining whether the averaging process used in calculating coefficient alpha is masking any inconsistent item (Malhotra and Birks, 2003).  $\beta$  is the standard unit of each independent variable which explains the significance value of each predictor in the equation (Auamnoy, 2002). From the prediction equation above, the results suggested that the beta coefficient indicated that once all independent variables have been standardised in the same unit, they can be ranked as follows:

The most powerful predictor in the Standardised Coefficient Equation is Activist (Beta Coefficient = -0.386). It indicated that Activist has a negative relationship with Organisational Effectiveness. Hence, it could be supposed that managers who have a high level of Activist are not supportive to the organisation. Transformational Leadership (Beta Coefficient = 0.336) has a positive

relationship with Organisational Effectiveness, suggesting that the managers who have a high level of Transformational Leadership are useful to the organisation. The Beta Coefficient of Reflector and Pragmatist are respectively 0.266 and 0.200, suggesting that these, too, have a positive relationship with Organisational Effectiveness and that Reflector and Pragmatist managers are likely to be helpful to the organisation. However, the Beta Coefficient of Theorist is -0.175, meaning that Theorist is another predictor which has a negative relationship with Organisational Effectiveness. It is approximately three times less powerful to the Organisational Effectiveness than is Activist, and it can be supposed that managers in this category are not supportive to the firm. Similarly, the Beta Coefficient of Laissez-faire Leadership is negative, -0.123, suggesting that Laissez-faire Leadership is also unhelpful to the organisation.

In addition, the Beta Coefficient of Number of Employees is 0.056. It suggests that Number of Employees has a positive relationship with Organisational Effectiveness. Hence, it could be supposed that the higher number of employees, the better the manager could perform. Next, the Beta Coefficient of Transactional Leadership is 0.054, suggesting a positive relationship with Organisational Effectiveness. So, it can be supposed that the manager who has a high level of Transactional Leadership is likely to be supportive to the firm. In addition, it suggests that Transactional Leadership is approximately seven times less powerful to the Organisational Effectiveness than the Transformational Leadership.

Age has a Beta Coefficient of 0.030, suggesting a positive relationship with Organisational Effectiveness. Therefore, it could be supposed that the older the manager, the better they could perform. Education, with a Beta Coefficient of 0.024, also has a positive relationship to Organisational Effectiveness and it could be supposed that the higher levels of education managers have, the better they perform. Next, The Beta Coefficient of Gender is -0.003, suggesting that male managers perform slightly better than female managers; however, this is largely irrelevant when compared to other variables. Last, the Beta Coefficient of Experience is 0.002, suggesting a positive relationship with Organisational Effectiveness and that the longer the experience the managers have, the better they perform.

**Table 9: Multicollinearity (Number of Employees and Demographics of Respondents, Learning Styles, Leadership Styles)**

| Predictors                  | Collinearity Statistics |       |
|-----------------------------|-------------------------|-------|
|                             | Tolerance               | VIF   |
| Number of Employees         | 0.724                   | 1.380 |
| Age                         | 0.770                   | 1.299 |
| Gender                      | 0.804                   | 1.243 |
| Education                   | 0.810                   | 1.234 |
| Experience                  | 0.681                   | 1.469 |
| Activist                    | 0.513                   | 1.950 |
| Pragmatist                  | 0.740                   | 1.351 |
| Reflector                   | 0.720                   | 1.389 |
| Theorist                    | 0.597                   | 1.674 |
| Transformational Leadership | 0.552                   | 1.813 |
| Transactional Leadership    | 0.924                   | 1.082 |
| Laissez-faire Leadership    | 0.906                   | 1.103 |

Dependent Variable: Organisational Effectiveness

As can be seen from Table 9 above, it was found that the Tolerance of each predictor is not lower than 0.100 and the Variance Inflation Factor (VIF) does

not exceed 3.16. In line with Hair et al.'s (2006) guidelines, no evidence of multicollinearity was found.

#### 4.5 Hypothesis 2: Impact of Learning Styles on Organisational Effectiveness

**Table 10: Model Summary (Learning Styles)**

| Independent Variables                        | Sig     |
|--|---------|
| Activist, Pragmatist, Reflector and Theorist | 0.000** |

\*\* Significance at the 0.01 level; Dependent Variable: Organisational Effectiveness

$H_0: \beta_1 = \beta_2 \dots = \beta_k = 0$ , there is no significant linear relationship between the set of predictors composed of Activist, Pragmatist, Reflector and Theorist, and the dependent variable, Organisational Effectiveness.

$H_1: \beta_i \neq 0, i = 1, 2 \dots k$ , there is a significant linear relationship between the set of predictors composed of Activist, Pragmatist, Reflector and Theorist, and the dependent variable, Organisational Effectiveness.

From Table 10 above, the results of ANOVA show a P value of 0.00 which is less than 0.05; therefore, the null hypothesis is rejected. It could be concluded that Learning Styles have an impact on Organisational Effectiveness. Once a set of independent variables impacts on dependent variable, the prediction equation can be ascertained.

**Table 11: Coefficient (Learning Styles)**

| Independent Variables | Standardised Coefficients |
|-----------------------|---------------------------|
|                       | Beta                      |
| Activist              | -0.553                    |
| Pragmatist            | 0.305                     |
| Reflector             | 0.324                     |
| Theorist              | -0.200                    |

Dependent Variable: Organisational Effectiveness

#### 4.5.1 Beta Coefficient

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

$$\text{Organisational Effectiveness} = -0.553 (\text{Activist}) + 0.305 (\text{Pragmatist}) + 0.324 (\text{Reflector}) - 0.200 (\text{Theorist})$$

Where:

Y = Organisational Effectiveness

$\beta_i$  = Beta Coefficient

$X_1$  = Activist

$X_2$  = Pragmatist

$X_3$  = Reflector

$X_4$  = Theorist

From the prediction equation, it was found that the most powerful predictor in the Standardised Coefficient Equation is Activist (Beta Coefficient = -0.553). It indicated that Activist has a negative relationship with Organisational Effectiveness, followed by Reflector (Beta Coefficient = 0.324) which has a positive relationship with Organisational Effectiveness. Next, the Beta Coefficient of Pragmatist is 0.305. The results suggest that Reflector has a

positive relationship with Organisational Effectiveness. Last, the Beta Coefficient of Theorist is -0.200. This suggests that Theorist is the least powerful predictor and it has a negative relationship with Organisational Effectiveness.

**Table 12: Multicollinearity (Learning Styles)**

| Independent Variables | Collinearity Statistics |       |
|-----------------------|-------------------------|-------|
|                       | Tolerance               | VIF   |
| Activist              | 0.624                   | 1.602 |
| Pragmatist            | 0.859                   | 1.164 |
| Reflector             | 0.784                   | 1.276 |
| Theorist              | 0.721                   | 1.388 |

Dependent Variable: Organisational Effectiveness

As can be seen from Table 12 above, it was found that the Tolerance of each predictor is not lower than 0.100 and the Variance Inflation Factor (VIF) does not exceed 3.16. In line with Hair et al.'s (2006) guidelines, no evidence of multicollinearity was found.

#### **4.6 Hypothesis 3: Impact of Leadership Styles on Organisational Effectiveness**

**Table 13: Model Summary (Leadership Styles)**

| Independent Variables                                     | Sig     |
|---|---------|
| Transformational, Transactional, Laissez-faire Leadership | 0.000** |

\*\* Significance at the 0.01 level; Dependent Variable: Organisational Effectiveness

$H_0: \beta_1 = \beta_2 \dots = \beta_k = 0$ , there is no significant linear relationship between the set of predictors composed of Transformational, Transactional, Laissez-faire Leadership and the dependent variable, Organisational Effectiveness.

$H_1: \beta_i \neq 0, i = 1, 2 \dots k$ , there is a significant linear relationship between the set of predictors composed of Transformational, Transactional, Laissez-faire Leadership and the dependent variable, Organisational Effectiveness.

From Table 13 above, the results of ANOVA show a P value of 0.00 which is less than 0.05; therefore, the null hypothesis is rejected. It could be concluded that Leadership Styles have an impact on Organisational Effectiveness. Once a set of independent variables impact on dependent variable, the prediction equation can be ascertained.

**Table 14: Coefficient (Leadership Styles)**

| Independent Variables       | Standardised Coefficients |
|-----------------------------|---------------------------|
|                             | Beta                      |
| Transformational Leadership | 0.707                     |
| Transactional Leadership    | 0.056                     |
| Laissez-faire Leadership    | -0.124                    |

Dependent Variable: Organisational Effectiveness

#### 4.6.1 Beta Coefficient

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$$

$$\text{Organisational Effectiveness} = 0.707(\text{Transformational Leadership}) + 0.056(\text{Transactional Leadership}) - 0.124(\text{Laissez-faire Leadership})$$

Where:

Y = Organisational Effectiveness

$\beta_i$  = Beta Coefficient

X<sub>1</sub> = Transformational Leadership

X<sub>2</sub> = Transactional Leadership

X<sub>3</sub> = Laissez-faire Leadership

From the prediction equation, it was found that the most powerful predictor in the Standardised Coefficient Equation is Transformational Leadership (Beta Coefficient = 0.707). It indicates that Transformational Leadership has a positive relationship with Organisational Effectiveness, followed by the Beta Coefficient of Laissez-faire Leadership at -0.124. The results suggest that Laissez-faire Leadership has a negative relationship with Organisational Effectiveness. This suggests that the manager who has a higher level of Laissez-faire is less likely to be supportive to the firm. Last, the Beta Coefficient of Transactional Leadership is 0.056, suggesting that Transactional Leadership has a positive relationship with Organisational Effectiveness.

**Table 15: Multicollinearity (Leadership Styles)**

| Independent Variables       | Collinearity Statistics |       |
|-----------------------------|-------------------------|-------|
|                             | Tolerance               | VIF   |
| Transformational Leadership | 0.935                   | 1.070 |
| Transactional Leadership    | 0.994                   | 1.006 |
| Laissez-faire Leadership    | 0.940                   | 1.064 |

Dependent Variable: Organisational Effectiveness

As can be seen from Table 15, it was found that the Tolerance of each predictor is not lower than 0.100 and the Variance Inflation Factor (VIF) does not exceed 3.16. In line with Hair et al.'s (2006) guidelines, no evidence of multicollinearity was found.

**Table 16: The Strength of Adjusted R<sup>2</sup> for Learning and Leadership Styles**

| Independent Variables  | Adjusted R <sup>2</sup> |
|--|-------------------------|
| Activist, Pragmatist, Reflector and Theorist                 | 0.682                   |
| Transactional, Transformational and Laissez-faire Leadership | 0.546                   |

Hair et al. (2006) recommend the adjusted R<sup>2</sup> when comparing models with different numbers of variables. More specifically, it is useful in comparing models between different data sets because it will compensate for the different sample sizes. It was found that the adjusted R<sup>2</sup> of Learning Styles is 0.682 whilst the adjusted R<sup>2</sup> of Leadership Styles is 0.546. Therefore, it could be concluded that Learning Styles is more powerful to Organisational Effectiveness compared to Leadership Styles.

#### **4.7 Hypothesis 4: Impact of Learning Styles and Leadership Styles on Organisational Effectiveness**

**Table 17: Model Summary (Learning Styles and Leadership Styles)**

| Model predictors  | Sig   | R <sup>2</sup> | Change in R <sup>2</sup> |
|---|-------|----------------|--------------------------|
| Model 1. Activist, Pragmatist, Reflector and Theorist                   | 0.000 | 0.691          | 0.691                    |
| Model 2. + Transactional, Transformational and Laissez-faire Leadership | 0.000 | 0.797          | 0.106                    |

Dependent Variable: Organisational Effectiveness

H<sub>0</sub>:  $\beta_1 = \beta_2 \dots = \beta_k = 0$ , there is no significant linear relationship between the set of predictors composed of Learning Styles, Leadership Styles and the dependent variable, Organisational Effectiveness.

H<sub>1</sub>:  $\beta_i \neq 0$ ,  $i = 1, 2 \dots k$ , there is a significant linear relationship between the set of predictors composed of Learning Styles, Leadership Styles and the dependent variable, Organisational Effectiveness.

To test the hypothesis, Model 2 has been considered because it has the highest value of  $R^2$ , 0.797. The results of ANOVA show a P value of 0.00 which is less than 0.05; therefore, the null hypothesis is rejected. It could be concluded that Learning Styles and Leadership Styles have an impact on Organisational Effectiveness.

Also from Table 17 above, the results suggest that Model 1, composed only of Activist, Pragmatist, Reflector and Theorist as independent variables, has  $R^2 = 0.691$ . After Transformational, Transactional and Laissez-faire Leadership Styles are added to this model (i.e. it becomes Model 2), the  $R^2$  increases to 0.797. Hair et al. (2006) recommended that  $R^2$  is the standard to use when comparing regression models. Hence, it could be concluded that the set of independent variables in Model 2 is more accurate to predict the dependent variable.

Moreover, the result of the change in  $R^2$  of Model 1 is 0.691 while the change in  $R^2$  of Model 2 is 0.106; therefore, it could be concluded that a set of Learning Styles is more powerful to Organisational Effectiveness than a set of Leadership Styles.

#### **4.7.1 The General Linear Model**

$$Y = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7$$

Where:

$$b_0 = \text{Constant}$$

X<sub>1</sub> = Activist

X<sub>2</sub> = Pragmatist

X<sub>3</sub> = Reflector

X<sub>4</sub> = Theorist

X<sub>5</sub> = Transformational Leadership

X<sub>6</sub> = Transactional Leadership

X<sub>7</sub> = Laissez-faire Leadership

Y = Organisational Effectiveness

**Table 18: Coefficient (Learning Styles and Leadership Styles)**

|                             | Unstandardised Coefficients | Standardised Coefficients |
|-----------------------------|-----------------------------|---------------------------|
|                             | B                           | Beta                      |
| (Constant)                  | 67.588                      |                           |
| Activist                    | -0.463                      | -0.393                    |
| Pragmatist                  | 0.318                       | 0.215                     |
| Reflector                   | 0.302                       | 0.271                     |
| Theorist                    | -0.219                      | -0.186                    |
| Transformational Leadership | 1.282                       | 0.350                     |
| Transactional Leadership    | 0.147                       | 0.051                     |
| Laissez-faire Leadership    | -0.609                      | -0.124                    |

Dependent Variable: Organisational Effectiveness

From Table 18 above, the prediction equation can be drawn as:

$$\text{Organisational Effectiveness} = 67.588 - 0.463 (\text{Activist}) + 0.318 (\text{Pragmatist}) + 0.302 (\text{Reflector}) - 0.219 (\text{Theorist}) + 1.282 (\text{Transformational Leadership}) + 0.147 (\text{Transactional Leadership}) - 0.609 (\text{Laissez-faire Leadership})$$

From the prediction equation, it was found that within the set of Learning Styles, Pragmatist is the most powerful predictor of Organisational Effectiveness

because it has the highest coefficient value, 0.318. This is followed by Reflector, at 0.302, suggesting a positive correlation with Organisational Effectiveness. On the other hand, the coefficient values of Theorist and Activist, -0.219 and -0.463 respectively, suggest that Theorist and Activist have a negative correlation with Organisational Effectiveness.

For the Leadership Styles, Transformational Leadership is the most powerful predictor of Organisational Effectiveness because it has the highest coefficient value, 1.282. Transactional Leadership is second, at 0.147. Laissez-faire Leadership (Coefficient value = -0.609) is the least powerful predictor of the set of Leadership Styles with negative correlation with Organisational Effectiveness.

#### **4.7.2 Beta Coefficient**

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7$$

$$\begin{aligned} \text{Organisational Effectiveness} = & -0.393 \text{ (Activist)} + 0.215 \text{ (Pragmatist)} + 0.271 \\ & \text{(Reflector)} - 0.186 \text{ (Theorist)} + 0.350 \text{ (Transformational Leadership)} + 0.051 \\ & \text{(Transactional Leadership)} - 0.124 \text{ (Laissez-faire Leadership)} \end{aligned}$$

From the prediction equation, it was found that the most powerful predictor in the Standardised Coefficient Equation is Activist (Beta Coefficient = -0.393), having a negative relationship with Organisational Effectiveness. Transformational Leadership has a Beta Coefficient of 0.350 suggesting a

positive relationship with Organisational Effectiveness. Next, Reflector has a Beta Coefficient of 0.271 suggesting that Reflector has a positive relationship with Organisational Effectiveness. In addition, Pragmatist has a Beta Coefficient of 0.215 suggesting that Pragmatist has a positive relationship with Organisational Effectiveness.

However, Theorist has a Beta Coefficient of -0.186 suggesting that Theorist has a negative relationship with Organisational Effectiveness. It is approximately two times less powerfully related to the Organisational Effectiveness than is Activist. Next, Laissez-faire Leadership has a Beta Coefficient of -0.124 suggesting that it has a negative relationship with Organisational Effectiveness. Last, Transactional Leadership has a Beta Coefficient of 0.051 suggesting that Transactional Leadership is approximately seven times less powerfully related to Organisational Effectiveness than is Transformational Leadership.

### 4.7.3 Multicollinearity

**Table 19: Multicollinearity (Learning Styles and Leadership Styles)**

| Independent Variables       | Collinearity Statistics |       |
|-----------------------------|-------------------------|-------|
|                             | Tolerance               | VIF   |
| Activist                    | 0.536                   | 1.865 |
| Pragmatist                  | 0.779                   | 1.283 |
| Reflector                   | 0.730                   | 1.369 |
| Theorist                    | 0.713                   | 1.403 |
| Transformational Leadership | 0.596                   | 1.677 |
| Transactional Leadership    | 0.953                   | 1.050 |
| Non Leadership              | 0.922                   | 1.085 |

Dependent Variable: Organisational Effectiveness

As can be seen from Table 19 above, it was found that the Tolerance of each predictor is not lower than 0.100 and the Variance Inflation Factor (VIF) does not exceed 3.16. In line with Hair et al.'s (2006) guidelines, no evidence of multicollinearity was found.

## 4.8 Mediation Testing

### 4.8.1 Organisational Effectiveness = $\alpha$ Number of Employees and Demographics of Respondents + $\alpha$ Learning Styles

4.8.1.1 Hypothesis 5: Impact of Number of Employees, Demographics of Respondents and Learning Styles on Organisational Effectiveness

**Table 20: Model Summary (Number of Employees, Demographics of Respondents and Learning Styles)**

| Independent Variables  | Sig   |
|--|-------|
| Number of Employees, Gender, Education, Experience, Activist, Pragmatist, Reflector and Theorist | 0.000 |

Dependent Variable: Organisational Effectiveness

$H_0: \beta_1 = \beta_2 \dots = \beta_k = 0$ , there is no significant linear relationship between the set of predictors composed of Number of Employees, Age, Gender, Education, Experience, Activist, Pragmatist, Reflector and Theorist, and the dependent variable, Organisational Effectiveness.

$H_1: \beta_i \neq 0, i = 1, 2 \dots k$ , there is a significant linear relationship between the set of predictors composed of Number of Employees, Age, Gender, Education, Experience, Activist, Pragmatist, Reflector and Theorist, and the dependent variable, Organisational Effectiveness.

From Table 20 above, the results of ANOVA show a P value of 0.00 which is less than 0.05; therefore, the null hypothesis is rejected. It could be concluded that Number of Employees, Demographics of Respondents and Learning Styles have an impact on Organisational Effectiveness. Once a set of independent variables impact on a dependent variable, the prediction equation can be ascertained.

**Table 21: Coefficient (Number of Employees, Demographics of Respondents and Learning Styles)**

| Independent Variables | Standardised Coefficients |
|-----------------------|---------------------------|
|                       | Beta                      |
| Number of Employees   | 0.143                     |
| Age                   | 0.005                     |
| Gender                | -0.018                    |
| Education             | 0.030                     |
| Experience            | 0.003                     |
| Activist              | -0.515                    |
| Pragmatist            | 0.264                     |
| Reflector             | 0.308                     |
| Theorist              | -0.155                    |

Dependent Variable: Organisational Effectiveness

#### 4.8.1.2 Beta Coefficient

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9$$

Where:

Y = Organisational Effectiveness

$\beta_i$  = Beta Coefficient

$X_1$  = Number of Employees

$X_2$  = Age

X<sub>3</sub> = Gender

X<sub>4</sub> = Education

X<sub>5</sub> = Experience

X<sub>6</sub> = Activist

X<sub>7</sub> = Pragmatist

X<sub>8</sub> = Reflector

X<sub>9</sub> = Theorist

Organisational Effectiveness = 0.143 (Number of Employees) + 0.005 (Age) - 0.018 (Gender) + 0.030 (Education) + 0.003 (Experience) - 0.515 (Activist) + 0.264 (Pragmatist) + 0.308 (Reflector) - 0.155 (Theorist)

From the prediction equation, it was found that the most powerful predictor in the Standardised Coefficient Equation is Activist (Beta Coefficient = -0.515), having a negative relationship with Organisational Effectiveness. Next, Reflector has a Beta Coefficient of 0.308 suggesting that Reflector has a positive relationship with Organisational Effectiveness. Pragmatist, with a Beta Coefficient of 0.264 also has a positive relationship with Organisational Effectiveness. The Beta Coefficient of Theorist is -0.155 suggesting that Theorist has a negative relationship with Organisational Effectiveness. In addition, the Beta Coefficient of Number of Employees is 0.143 suggesting that it has a positive relationship with Organisational Effectiveness. Education, with a Beta Coefficient of 0.030 also has a positive relationship with Organisational Effectiveness. Next, Gender, has a Beta Coefficient of -0.018, suggesting a negative relationship with Organisational Effectiveness. This suggests that

Gender is approximately 27 times less relevant to Organisational Effectiveness than is Activist. Last, the Beta Coefficient of Age and Experience are 0.005 and 0.003 respectively. This suggests that Age and Experience have a positive relationship with Organisational Effectiveness.

**Table 22: Multicollinearity (Number of Employees, Demographics of Respondents and Learning Styles)**

| Independent Variables | Collinearity Statistics |       |
|-----------------------|-------------------------|-------|
|                       | Tolerance               | VIF   |
| Number of Employees   | 0.780                   | 1.282 |
| Age                   | 0.783                   | 1.277 |
| Gender                | 0.829                   | 1.206 |
| Education             | 0.810                   | 1.234 |
| Experience            | 0.686                   | 1.458 |
| Activist              | 0.574                   | 1.742 |
| Pragmatist            | 0.784                   | 1.276 |
| Reflector             | 0.764                   | 1.310 |
| Theorist              | 0.605                   | 1.652 |

Dependent Variable: Organisational Effectiveness

As can be seen from Table 22 above, it was found that the Tolerance of each predictor is not lower than 0.100 and the Variance Inflation Factor (VIF) does not exceed 3.16. In line with Hair et al.'s (2006) guidelines, no evidence of multicollinearity was found.

**4.8.2 Organisational Effectiveness =  $\alpha$  Number of Employees and Demographics of Respondents +  $\alpha$  Learning Styles+  $\alpha$  Leadership Styles**

4.8.2.1 Hypothesis 6: Influence of Number of Employees, Demographics of Respondents, Learning Styles and Leadership Styles on Organisational Effectiveness

**Table 23: Model Summary (Number of Employees and Demographics of Respondents, Learning Styles, Leadership Styles)**

| Independent Variables   | Sig   |
|---|-------|
| Number of Employees, Age, Gender, Education, Experience, Activist, Pragmatist, Reflector, Theorist, Transformational, Transactional, Laissez-faire Leadership | 0.000 |

Dependent Variable: Organisational Effectiveness

$H_0: \beta_1 = \beta_2 \dots = \beta_k = 0$ , there is no significant linear relationship between the set of predictors composed of Demographics of Respondents, Learning Styles, Leadership Styles and the dependent variable, Organisational Effectiveness.

$H_1: \beta_i \neq 0, i = 1, 2 \dots k$ , there is a significant linear relationship between the set of predictors composed of Demographics of Respondents, Learning Styles, Leadership Styles and the dependent variable, Organisational Effectiveness.

From Table 23 above, the results of ANOVA show a P value of 0.00 which is less than 0.05; therefore, the null hypothesis is rejected. It could be concluded that Number of Employees, Demographics of Respondents, Learning Styles and Leadership Styles all impact on Organisational Effectiveness. Once a set of independent variables impact on a dependent variable, the prediction equation can be ascertained.

**Table 24: Coefficient (Number of Employees and Demographics of Respondents, Learning Styles, Leadership Styles)**

| Independent Variables       | Standardised Coefficients |
|-----------------------------|---------------------------|
|                             | Beta                      |
| Number of Employees         | 0.056                     |
| Age                         | 0.030                     |
| Gender                      | -0.003                    |
| Education                   | 0.024                     |
| Experience                  | 0.002                     |
| Activist                    | -0.386                    |
| Pragmatist                  | 0.200                     |
| Reflector                   | 0.266                     |
| Theorist                    | -0.175                    |
| Transformational Leadership | 0.336                     |
| Transactional Leadership    | 0.054                     |
| Laissez-faire Leadership    | -0.123                    |

Dependent Variable: Organisational Effectiveness

#### 4.8.2.2 Beta Coefficient

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12}$$

Where:

Y = Organisational Effectiveness

$\beta_i$  = Beta Coefficient

$X_1$  = Number of Employees

$X_2$  = Age

$X_3$  = Gender

$X_4$  = Education

$X_5$  = Experience

$X_6$  = Activist

$X_7$  = Pragmatist

X<sub>8</sub> = Reflector

X<sub>9</sub> = Theorist

X<sub>10</sub> = Transformation Leadership

X<sub>11</sub> = Transactional Leadership

X<sub>12</sub> = Laissez-faire Leadership

Organisational Effectiveness = 0.056 (Number of Employees) – 0.030 (Age) – 0.003 (Gender) + 0.024 (Education) + 0.002 (Experience) – 0.386 (Activist) + 0.200 (Pragmatist) + 0.266 (Reflector) – 0.175 (Theorist) + 0.336 (Transformational Leadership) + 0.054 (Transactional Leadership) – 0.123 (Laissez-faire Leadership)

The most powerful predictor in the Standardised Coefficient Equation is Activist (Beta Coefficient = -0.386), suggesting a negative relationship with Organisational Effectiveness. Transformational Leadership (Beta Coefficient = 0.336) has a positive relationship with Organisational Effectiveness suggesting that the managers who have a high level of Transformational Leadership are useful to the organisation. Additionally, the Beta Coefficient of Reflector and Pragmatist are respectively 0.266 and 0.200 suggesting that these, too, have a positive relationship with Organisational Effectiveness. The Beta Coefficient of Theorist is -0.175 suggesting that Theorist has a negative relationship with Organisational Effectiveness. Similarly, Laissez-faire Leadership, presented with a Beta Coefficient of -0.123 indicates that it has a negative relationship with Organisational Effectiveness. In addition, the Beta Coefficient of Number of Employees is 0.056 suggesting that it has a positive relationship with

Organisational Effectiveness. Transactional Leadership (Beta Coefficient = 0.054) has a positive relationship with Organisational Effectiveness. In relation to Organisational Effectiveness, statistically speaking, Transformational Leadership is seen to be at least 7 times more influential as compared to Transactional Leadership. Moreover, the Beta Coefficient of Age is 0.030 which suggests that Age has a positive relationship with Organisational Effectiveness. Likewise, Education, with a Beta Coefficient of 0.024, also has a positive relationship with Organisational Effectiveness. In contrast, the Beta Coefficient of Gender is -0.003, suggesting that it has a negative relationship with Organisational Effectiveness. Lastly, the Beta Coefficient of Experience is 0.002, suggesting that it has a positive relationship with Organisational Effectiveness.

#### 4.8.2.3 Multicollinearity

**Table 25: Multicollinearity (Number of Employees and Demographics of Respondents, Learning Styles, Leadership Styles)**

| Independent Variables       | Collinearity Statistics |       |
|-----------------------------|-------------------------|-------|
|                             | Tolerance               | VIF   |
| Number of Employees         | 0.724                   | 1.380 |
| Age                         | 0.770                   | 1.299 |
| Gender                      | 0.804                   | 1.243 |
| Education                   | 0.810                   | 1.234 |
| Experience                  | 0.681                   | 1.469 |
| Activist                    | 0.513                   | 1.950 |
| Pragmatist                  | 0.740                   | 1.351 |
| Reflector                   | 0.720                   | 1.389 |
| Theorist                    | 0.597                   | 1.674 |
| Transformational Leadership | 0.552                   | 1.813 |
| Transactional Leadership    | 0.924                   | 1.082 |
| Laissez-faire Leadership    | 0.906                   | 1.103 |

Dependent Variable: Organisational Effectiveness

As can be seen from Table 25 above, it was found that the Tolerance of each predictor is not lower than 0.100 and the Variance Inflation Factor (VIF) does not exceed 3.16. In line with Hair et al.'s (2006) guidelines, no evidence of multicollinearity was found.

**Table 26: Adjusted R<sup>2</sup> and Beta Coefficients for 1st and 2nd Equations**

| Independent Variables   | Equation  |   |
|-------------------------|---|---|
|                         | (1 <sup>st</sup> Equation) Number of Employees, Demographics of Respondents and Learning Styles | (2 <sup>nd</sup> Equation) +Leadership Styles |
| Adjusted R <sup>2</sup> | 0.688   | 0.781   |
| Activist                | -0.515  | -0.386  |
| Pragmatist              | 0.264   | 0.200   |
| Reflector               | 0.308   | 0.266   |
| Theorist                | -0.155  | -0.175  |

Dependent Variable: Organisational Effectiveness

### 4.8.3 Summary

Hair et al. (2006) strongly recommended the adjusted R<sup>2</sup> in comparing models with different numbers of independent variables. The adjusted R<sup>2</sup> is also useful in comparing models between different data sets because it will compensate for the different sample size (p. 234). Hence, in this study, adjusted R<sup>2</sup> is considered for comparing between 2 equations. It was found an adjusted R<sup>2</sup> for the second equation is 0.781 which is greater than the adjusted R<sup>2</sup> of the first equation which is 0.688. This indicates that the set of independent variables in the second equation explain the dependent variables more fully than the set of independent variables in the first equation. In addition, when adding the Leadership Styles variables into the equation, the Beta Coefficient values of the Learning Styles variables change. Thus, it was found, for this study, that the effect of Learning Styles on Organisational Effectiveness is mediated by Leadership Styles.

## **5. Conclusion**

This chapter presented the research findings, from the analysis by a variety of appropriate statistical tests of the collected data. The results indicate that the number of employees is positively correlated with learning styles, leadership styles and Organisational Effectiveness. However, the findings indicate a relatively weak correlation between the demographics of respondents and these factors. In addition, the results confirmed that the relationship between either learning styles or leadership styles and Organisational Effectiveness is positively significant. Elaborately, the results of Multiple Regression Analysis indicate that Pragmatist and Reflector learning styles, and Transformational and Transactional leadership are supportive to the firm. Furthermore, the effect of managers' learning styles is mediated by their leadership styles in relation to Organisational Effectiveness. Hence, it may be useful to gain a deep understanding on how individual manager apply their learning styles and leadership styles to develop their firms.

The following chapter describes the qualitative approach applied to analyse data collected by semi-structured interview; this offers a more detailed and deeper understanding of the managers' contribution to encourage learning within their firms, resulting in different levels of Organisational Effectiveness.

# **CHAPTER 6 QUALITATIVE DATA ANALYSIS**

## **1. Introduction**

Qualitative research is a useful approach for understanding people, what they think, feel, hope, believe and understand. It also allow one to study “how things work in particular contexts” (Mason, 2002). It enables the study of things in their natural setting, allowing the researcher to make sense of, or to interpret, phenomena in terms of the meanings people bring to them (Denzin and Lincon, 2000). The central data-gathering techniques of a qualitative approach are participant observation, and interviewing. Qualitative methods attempt to capture and understand individual definitions, descriptions and the meaning of events (Burns, 2000). It allows the researcher to develop and study a range of types rather than determine their frequency or distribution; and it helps the analysis by providing explanation in both breadth and depth. Qualitative methods are therefore appropriate for analysing the research questions posed in this thesis.

## **2. The Semi-Structured Interview**

The semi-structured interview, consisting of questions that the respondents can answer freely, helps the researcher to gather participants’ responses in breadth and depth (Morse, 1992). These data are reported as narrative containing direct quotations from interview statements and fieldnotes. They confer a sense of

reality, describing accurately what the informants feels and perceives, and how they behave (Burns, 2000). In this research, interviews investigated the individual's experience and context, to achieve specific perspectives from respondents. The researcher gave respondents the opportunity to express all related views, supported debate and exploration, and was able to elicit additional information by probing and discussing answers (Morse, 1992). Consequently, this method allows the researcher to interview the informants comprehensively by following key themes that need to be explored. Further, the researcher asked each respondent the same questions in the same order to ensure that the interview data from one participant could be compared with the responses of others.

### **3. Pilot Study**

Because the semi-structured interview is flexible, the researcher has a list of questions or fairly specific topics to be covered, and the pilot study is helpful for refining the questions, and including new questions based on comments picked up on or given by interviewees. The pilot study makes the interviewer more familiar with the focus of the interview, and able to appreciate what the interviewees see as significant (Bryman, 2004). The pilot study took place in January 2006 (see the pilot-study and follow-up questions in appendix E and F). Two respondents were interviewed in order to refine the questions and also to estimate the length of time per interview. This pilot study raised several issues which had not been anticipated, and some of the questions were rephrased accordingly, to obtain more in-depth information.

Further, it was noted during the pilot study that the interviews lasted over two hours, so the questions were reconstructed to be less time consuming, and more focused and specific.

#### **4. Sampling**

The research sample needs to be carefully selected, not necessarily to be representative of the entire population but rather to represent a key aspect of that domain (Gordon, 1999). For a continuous variable, the choices are not so obvious. However, the researcher is well advised to choose sampling from both extreme values, high and low (Gearing, 2007). Covin and Slevin (1988) writing on the relationship between entrepreneurial behaviour and organisational structure, evolved and validated a tool using six statements of managerial process to evaluate the degree to which respondent firms exhibit an entrepreneurial style. They recommended classifying groups by selecting the overall mean for all scale attributes as the dividing point. Hence, the firms in a sample which have a mean overall score equal to or less than the overall sample mean can be classified as being biased towards operating as non-entrepreneurial firms and those firms which have a mean score greater than the overall sample mean can be classified as being biased towards operating as entrepreneurial firms.

In relation to the organisational effectiveness section in the questionnaire, the results show a mean score of 74; based on this, firms were classified into two

groups: those attaining organisational effectiveness greater and lower than the mean score, i.e. the more effective and less effective firms.

Ritchie and Lewis (2003) recommend that, in general, qualitative samples for a single case study involving individual interviews only be below 50. If they are larger than that, they start to become difficult to manage in terms of the quality of data collection and analysis that can be achieved. However, it is also essential to make sure that samples are not too small. The sample size in a qualitative study must support the study's purpose and generate sufficient data to address the research question posed (Mason, 2002). In addition, the sampling or case should be extreme and deviant; cases are chosen because they are unusual or special and therefore potentially enlightening (Robson, 2002; Patton, 2002). Therefore, the top ten firms of each group were selected; of the twenty managers interviewed, ten respondents were selected from the "more effective" firms and the other ten from the "less effective" firms.

## **5. Data Collection**

The data were entered immediately on receiving the completed questionnaires and analysed using SPSS. The results were sent to the researcher's supervisor, who is an expert in this field of research. The supervisor recommended that in order to achieve a deeper understand of how managers manage their firms differently, it would be useful to apply the qualitative method. Furthermore, the results from the questionnaires clearly helped to form the core questions to ask in

the interviews because they obviously emphasised that there were different types of learning styles and leadership styles of managers with different levels of organisational effectiveness of each firm. Hence, to attain a deeper understanding, the data collection took place from January to April 2006 in different provinces in north-eastern Thailand. Each interview appointment was confirmed one week in advance over the phone. Interview sessions took place in the private office of each respondent within the office hours of 8:00 am to 5:00 pm. Because of the tight schedule of respondents, the interview period lasted between 40 minutes to an hour. The interviewer's main responsibilities were to ask the questions in such a way as to obtain valid responses and to record the responses accurately and completely (Burns, 2000). Accordingly, recording and written interpretation were made during the interview to confirm the accuracy of quotes and descriptions. The researcher realised that the records collected included personal data and private information, so permission for written notes and tape recordings was obtained prior to the interviews.

## **6. Inductive-based analytical strategies and procedures**

“The use of the inductive approach allows a good ‘fit’ to develop between the social reality of the research participants and the theory that emerges will be grounded in that reality”; the theory's generalisability may also be tested in other contexts, and the researcher may need to compare the explanations with existing theory (Saunders et al., 2003, p. 393). One of the most common strategies used in qualitative method for analysing data is called data display and analysis. It is

composed of three simultaneous processes: data reduction, data display and drawing and verifying conclusions. Data reduction refers to the process of summarising and simplifying data as well as to selectively focusing on some parts of the data, while data display involves organising and assembling the selected data into diagrammatic or visual displays, by matrices or networks. Data are held in matrices are tabular form, with defined columns and rows; a network is a collection of nodes or boxes linked by lines, each node containing descriptions or labels to highlight key points from the data. Display data are useful for drawing and verifying conclusions, as they help to identify relationships and patterns in the data and make comparisons between data elements, and to identify any relationships, key themes, patterns and trends that may be evident (Miles and Huberman, 1994).

Baptiste (2001) identifies four interrelated phases in qualitative data analysis: defining the analysis, classifying data, making connections between data elements, and conveying the message. Marshall and Rossman (1999) suggest six general phases of data analysis, irrespective of the approach adopted: organising the data, generating categories, coding data, testing the emerging understanding, searching for alternative explanations, and writing the report. More importantly, it is recognised that the purpose of all approaches used to analyse qualitative data is to concentrate on grouping based on shared themes in order to understand the content of the text in its breadth and depth. Hence, different combinations of methods of analysis were used to analyse the data.

Computer-assisted qualitative analysis also helps the researcher to quickly and easily store the material in one place, and to observe the database line by line, considering the meaning of each sentence and idea (Creswell, 1998). This helps to enhance and constrain the data through the ease of cutting and sorting it (Ritchie and Lewis, 2003). All information was therefore transcribed and stored by NVIVO version 2.0, one of the best known qualitative software programs, which provides a wide variety of tools for managing rich data records and information about them. More specifically, it is useful for browsing and enriching text, coding it visually or into other categories, and annotating and gaining access to data records precisely and quickly (Richards, 1999).

Researchers examine many ways of coding to help them extract meaning from their data (Rubin and Rubin, 1995). Unlike quantitative analysis, there are no clearly agreed rules or procedures for qualitative data analysis. Approaches vary in terms of basic epistemological assumptions about the nature of qualitative enquiry and the status of researchers' accounts (Ritchie and Lewis, 2003). Therefore, a variety of coding techniques were applied for categorising the interview data. The researcher first reviewed all information by looking at the observation field notes and interview transcriptions to obtain a sense of the overall data; this approach is also suggested by Tesch (1990). At a later stage, the researcher summarised the field notes by highlighting certain important information in descriptions. This was followed by the word repetition technique, which enables the researcher to look at keywords in context. Words that occur

frequently are seen as being significant in the minds of respondents (Rubin and Rubin, 1995).

Accordingly, in another approach suggested by Cresswell (1998), some of the findings were presented in the form of tables and charts to make comparisons between cases. In order to relate the data to the themes, all information was classified and sorted into categories, using sorting and cutting techniques. This is useful for developing categories and reducing the information (Baptiste, 2001; Ryan and Bernard, 2007). Once the researcher had grouped similar descriptions together and related different ideas to one another, the data were grouped in categories to allow comparing and contrasting the interview descriptions, and to organise the themes, concepts, and ideas of each interview category around the issues of the study. Finally, all data were re-reviewed according to whether they were similar to or different from the core content vis-à-vis the related categories.

## **7. Findings**

The resource-based view is mainly correlated with two sectors, operational process and human capital. RBV is considered as a valuable concept that could help increase revenues and can identify human resources with rare characteristics that are not easy to replicate. With the appropriate organisational system to get the most from its employees, this combination of factors can lead to competitive advantage (Barney and Wright, 1998). Michie and Oughton (2001) suggested

that one of the most important factors to drive a company's success is its people, and RBV is the concept that makes the most use of resources. Moreover, RBV also helps explain that SHRM is sustainable in increasing skills and capabilities of employees (Richard and Johnson, 2001b). Likewise, Lengnick-Hall et al. (2009) asserted that HR practices were likely to yield better performance if they were matched with specific objectives, conditions, and strategic interests. In addition, organisational management is composed of two main parts; operational management and human resource management. Therefore, understanding how managers maintain their organisation by looking at organisational management would lead to understanding how they can make the best use of organisational resources.

Furthermore, applying appropriate leadership could help to create organisational learning and may increase productivity in the end (Senge, 1990). While different organisations require managers to serve the organisation in different roles, it may be helpful to understand the leadership role of managers in different firms to see what they have done differently to attain different levels of organisational effectiveness. Last, Senge (1992) suggested that to encourage learning within the organisation and continually increase productivity, an organisation may need to encourage generative learning, and try to discover how to tap people's commitment and capacity to learn. To encourage generative learning, the organisation needs to continually create a learning environment for organisational members to extend their skills, based on their experience in correcting mistakes. When this knowledge is shared with others, it may influence

organisational members' skills. Hence, understanding managers' learning and experience may help to explain the way they achieve knowledge and transfer it to others.

To conclude, in relation to the research question and theoretical framework, this data analysis aims to provide an understanding of descriptions, and an explanation of managers' beliefs, and their perceptions and intentions. Accordingly, the findings in this section cover three main areas: Organisational Management, Leadership Role, and Learning and Experience.

## **7.1 More Effective Firms**

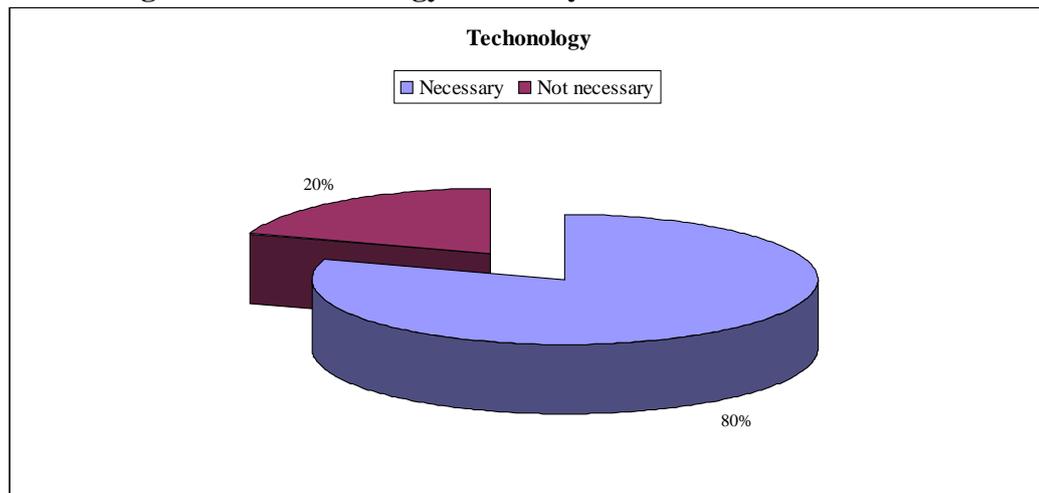
### **7.1.1 Organisational Management**

Kumle and Kelly (2006) defined management as “the judicious use of means to accomplish an end”. Its mission is success and effectiveness in the modern world, where management takes precedence over process or operation and people management (Hulme, 2006). Organisation is defined as a social arrangement for achieving controlled performance in pursuit of collective goals (Buchanan and Huczynski, 2004). The key issue is to investigate how managers could contribute their expertise in leading their firm successfully. The interviews suggest that management falls into two main categories: operational management and human resource management.

### 7.1.1.1 Operational Management

#### 7.1.1.1.1 Technology

**Figure 12: Is technology necessary to the success of the firm?**

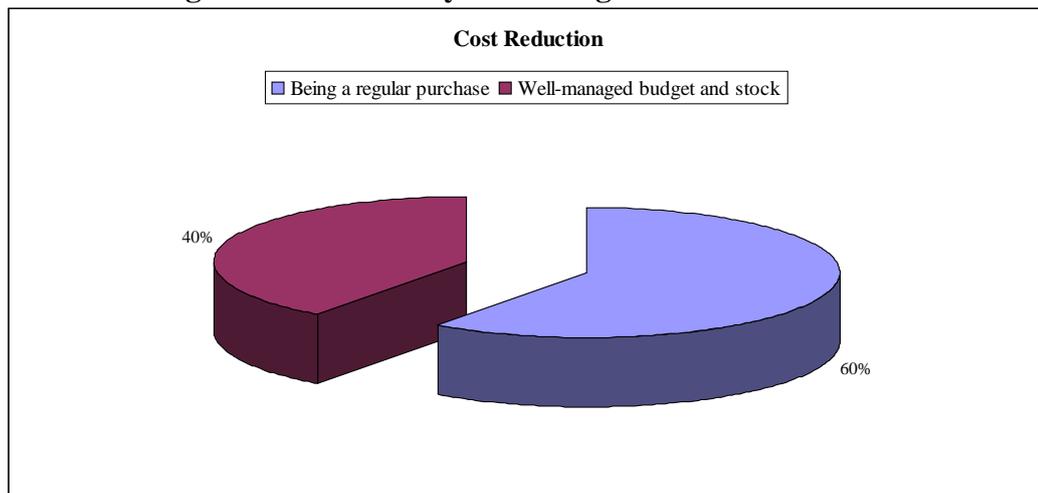


80 per cent of managers interviewed said that technology is necessary to the success of the firm. The majority of managers are aware of the highly competitive nature of modern business, and providing good quality service is one of the most important factors in meeting customers' needs. So, most of the firms have decided to invest in high technology and modern machinery to provide good services and impress customers. Managers interviewed stated that these high technology instruments could save customers' time, and that they are reliable in terms of providing a high standard of service. Some managers gave examples of how new technology is helpful to their business, such as gathering customers' profiles into the computer database; in this way they could search for customers' detailed profiles more easily, for example being able to contact customers in advance when they need to change their tyres.

However, 20 per cent of managers said that investing in high technology is not necessary to the success of firm. Those managers point out that spending too much money on high tech equipment is not worthwhile, as there are other techniques to impress customers and make them trust in their services. For example, one manager interviewed emphasised that instead of spending a lot of money on buying new machines, he would rather use that money to invest in promotion plans such as reducing the cost of services to customers.

#### 7.1.1.1.2 Cost Reduction

**Figure 13: What are your strategies of cost reduction?**



Providing customers with low-cost products and services is another important issue. Most managers interviewed emphasised that cost reduction is currently the main area of concern for firms. It was found that 60 per cent of managers interviewed emphasised that it is important to be a regular purchaser and to have a good relationship with the tyre manufacturer in order to get the best price. One raised the example of cost control: it is necessary to pay the bill on time and

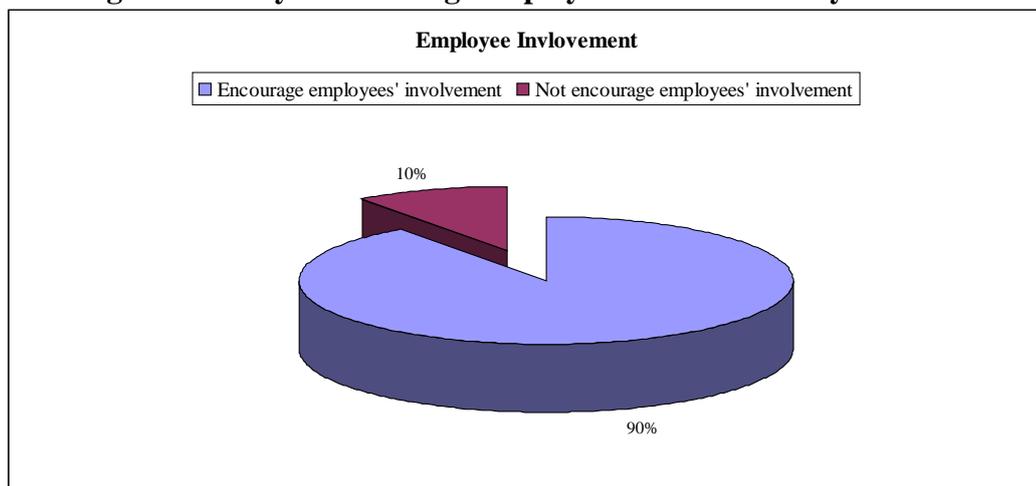
regularly order the product in order to be classified as a special customer of the tyre manufacturer. Then, the firm will have the advantage of receiving special offers from the tyre manufacturer.

40 per cent showed that the firm needs to have a well managed budget and stock control. For example, because the unit price of a product is unpredictable, dependent on various factors such as the cost of raw materials and petrol, the firm should not stock too much or too little of the product in the warehouse.

#### 7.1.1.2 Human Resource Management

##### 7.1.1.2.1 Contribution and Job Description

**Figure 14: Do you encourage employee involvement in your firm?**



90 per cent of managers interviewed emphasised that they encourage their employees to be involved in discussion and making decisions, and in making their own day-to-day job decisions. They emphasise that this improves

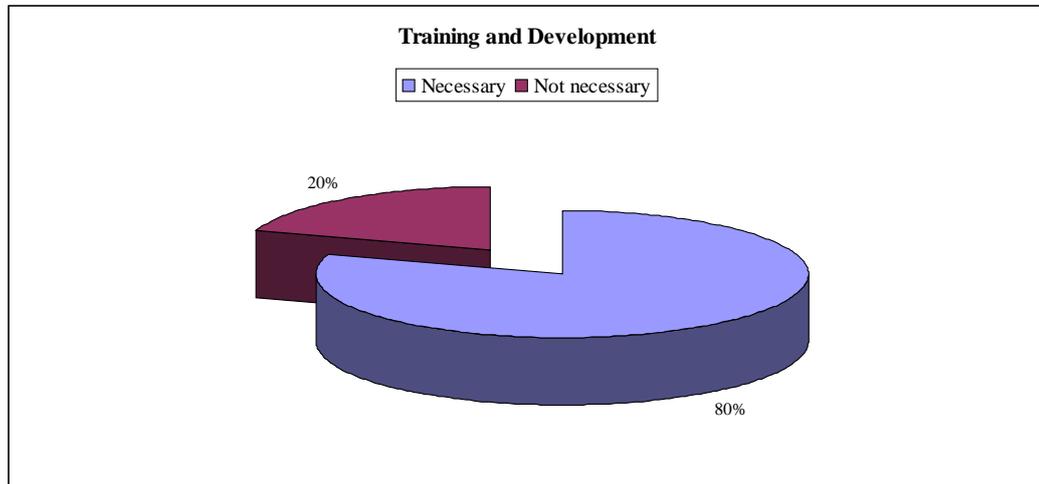
productivity. However, they realise that it requires a certain period of time to train employees.

In contrast, 10 per cent of managers interviewed declared that they were the single person responsible for day-to-day job decisions. They said that their employees had a low educational background, so they did not trust their decision-making ability.

Furthermore, most firms have a similar organisational structure: the foreman is assigned the overall task by the manager, and then allocates each task to individual workers. Each worker is assigned a specific task depending on their skills. Once the task had been completed the foreman checks the quality of the work. If there is a problem, the foreman must solve it. However, if the foreman faces any serious difficulties or complex problems, he or she will inform the manager, who makes decisions in that situation. In addition, in order to improve the work environment, most managers interviewed say that they encourage their workers to share ideas on developments within the firm.

#### 7.1.1.2.2 Training and Development

**Figure 15: Are training and development necessary to the success of the firm?**



From the interviews, it was found that 80 per cent emphasised that training and development are necessary to the success of the firm, while 20 per cent said that they are not necessary. Most firms are concerned with the development of their employees' skills. Some managers interviewed seek to ensure that their employees are well trained, in an attempt to apply employees' abilities to best effect. Training and development have a role to play, as do reward systems to maximise employees' effort and focus attention on providing customer satisfaction.

One emphasised that it is important to have regular meetings with employees, usually once a week in his firm. The main point of the meeting is to encourage employees to become service-minded and be willing to serve customers. Employees are supposed to be able to provide customers with a clear explanation

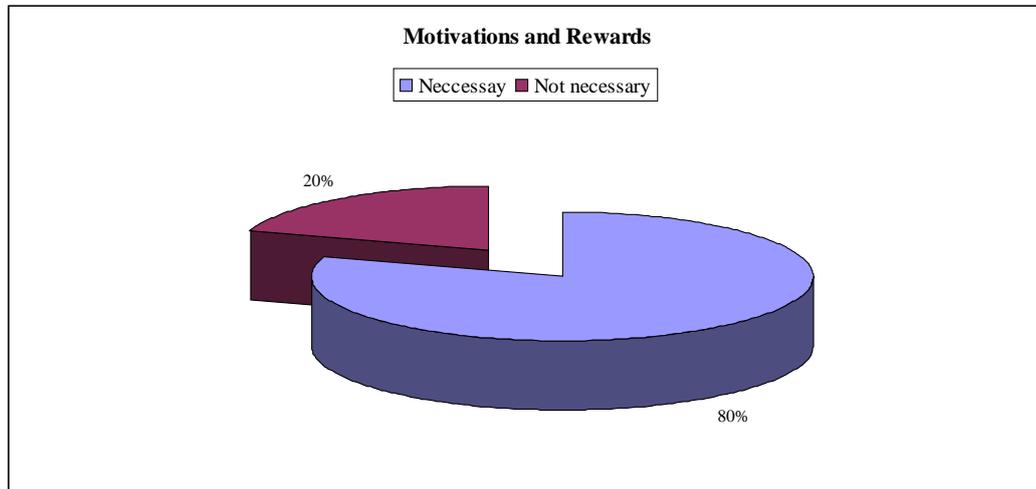
of each product. Everyone is required to dress in the same uniform, with the employee's name.

Another respondent added an interesting point that in order to make the most of employees' abilities, the firm had participated in the tyre company programme which provides an intensive workshop for developing specific technical skills. For example, the firm selected the right people to attend the appropriate workshop in each specific area and bring back the skills to apply in the firm. In addition, some firms created an environment to encourage their employees to develop their skills, such as creating a simulated work environment to help employees practise their technical skills, such as working in two teams and then comparing the time of each team in changing a tyre. They confirmed that this activity could help employees share ideas and knowledge, as well as creating a good relationship among team members in the firm.

20 per cent of interviewees emphasised that training and development are not necessary to the success of their firm because their employees could learn and develop skills by observing their colleagues in the workplace.

### 7.1.1.2.3 Motivations and Rewards

**Figure 16: Are motivations and rewards necessary to the success of the firm?**

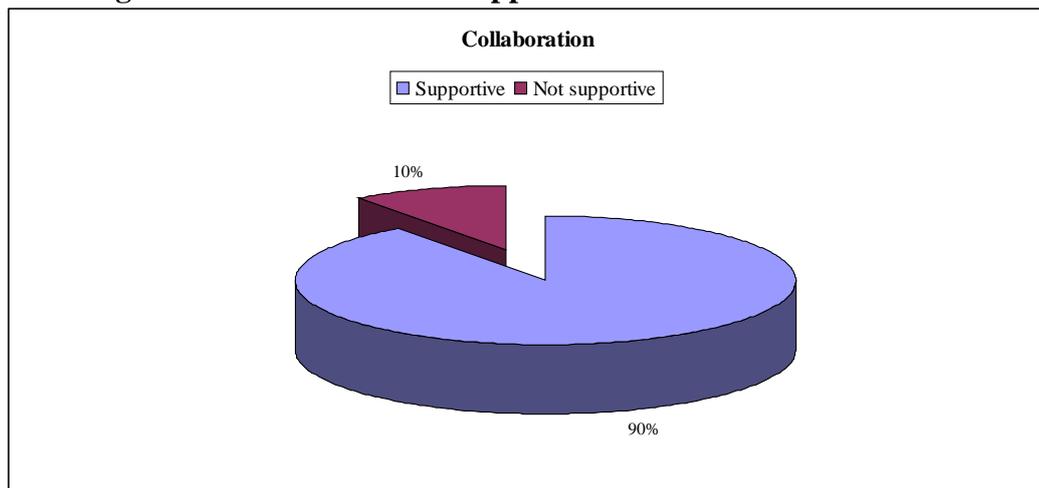


80 per cent of managers interviewed emphasised that motivations and rewards are necessary to the firm. Most managers interviewed emphasised that reward is one of the most effective tools to motivate employees to work to the best of their ability. Some interviewees, for example, give 5 per cent of the price of the product per unit as commission to their employees. The commission is calculated every month and depends on individual performance. In addition, several respondents emphasised that each worker receives an annual bonus. However, each employee will receive varying amounts of cash bonus depending on their performance. This encourages employees to be energetic throughout the year and it directly affects the overall sale volume of the firm. In addition, some firms offer a reward for employees who have performed well throughout the year, for example always being punctual. Some interviewees said that they look for good employees every month and then provide them with a special reward. This way is successful in encouraging self-development among the employees.

In contrast, 20 per cent of interviewees said that motivations and rewards are not necessary to the success of their firm. They gave the example of providing commission to their employees: as the unit cost of products is comparatively high, they only make a small amount of profit per unit, and so cannot spare extra money to encourage their employees.

#### 7.1.1.2.4 Collaboration

**Figure 17: Is collaboration supportive to the success of the firm?**

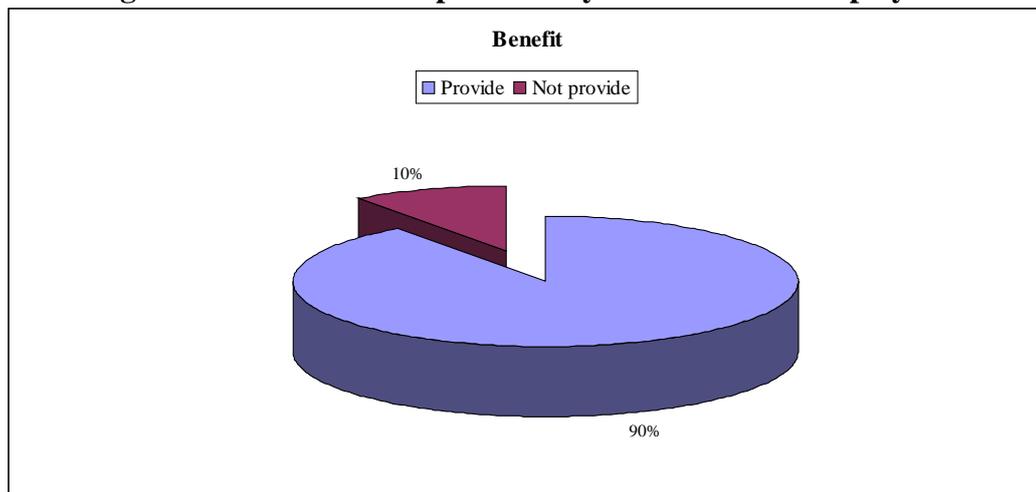


90 per cent of managers interviewed emphasised that collaboration is supportive to the success of their firm. They said that good teamwork can lead to improved quality of work. Teamwork requires commitment from individual employees, and improvement can happen only when each worker is fully committed to the firm's goal. Most firms therefore create outside activities to reinforce the work relationship, for example a short trip to spend time together in another city. This could help employees learn more about their differences and find ways to adjust themselves as members of a team.

10 per cent of interviewees said that collaboration is not supportive to the success of the firm. They emphasised that if the employees are too close to each other, it could lead to a lot of problems within the workplace, such as corruption. They said that in the past some employees helped each other to steal tools from the workplace.

#### 7.1.1.2.5 Benefit

**Figure 18: Does the firm provide any benefits to the employees?**



90 per cent said that they provide benefits to their employees. Nearly all respondents emphasised that employees are the most valuable resource of the firm and that they therefore try to keep employees with them as long as possible. Many managers interviewed said that they treat their employees as members of the family. For example, if an employee has a financial problem, those interviewees will offer loans without claiming any interest. In addition, to encourage employees to stay and perform at their best, most firms offer benefits such as accommodation, meals, transport and uniforms.

In contrast, 10 per cent of interviewees said that they do not provide any additional benefits to their employees because they are local people who have a simple lifestyle and are satisfied with their income.

#### 7.1.1.3 Summary

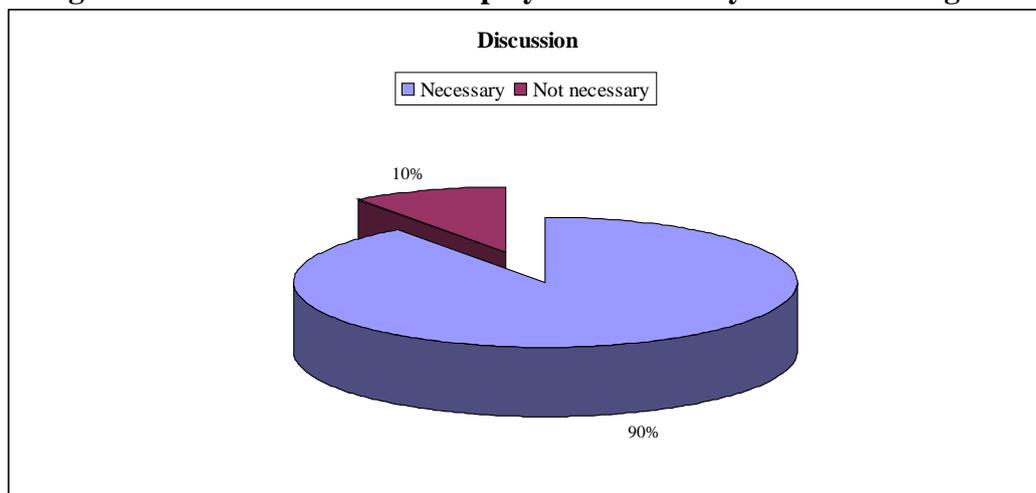
In conclusion, interviews suggest that almost all interviewees in the more effective firms agreed that operations and people are the key factors driving the success of the firm. They emphasise that technology and cost reduction are useful in maintaining productivity. However, they also realise that it may take time to maintain the skills of employees but they agreed it is supportive to their business. At the same time, they are seeking to find effective ways of gradually developing the skills of employees, with different methods such as sending employees to attend workshops, encouraging them to practise skills by learning from simulation in the work environment, persuading them to share ideas and knowledge, and motivating them to work at their best. Hence, managers interviewed in more effective firms have managed their firms in ways which accomplish the organisational goals.

#### **7.1.2 Leadership Role**

The manager establishes vision and direction, influences others to employ that vision, and inspires them to create positive and radical change (Kotter, 1990). In

addition, the Leadership role may consist of creating agendas, establishing direction, aligning and motivating people, collaborative working, and producing positive and dramatic change (Goleman, 2000). The conceptual framework of this study requires an understanding of the Leadership role in order to help clarify proactive roles of managers interviewed within small tyre firms; the Leadership role was therefore one of the key issues discussed during the interviews.

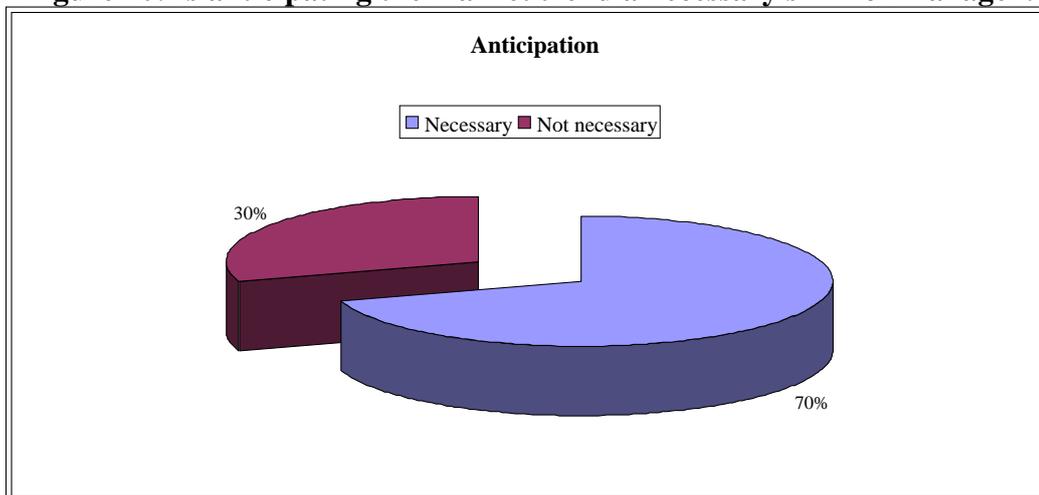
**Figure 19: Is discussion with employees a necessary skill for managers?**



It was found that 90 per cent of interviewees in the more effective firms regularly spend time discussing employees' problems, such as matters occurring in the workplace. For example, one manager said that "I often spend time during the day in discussion with and listening to my employees". In the event of a conflict between employees, an influential and experienced person is called in. For instance, another manager said that "I carefully look around to check whether any problems happen in my workplace by paying particular consideration to anyone who is isolated from the workplace". This showed that this manager is attentive and prepared to monitor the occurrence of problems in his workplace,

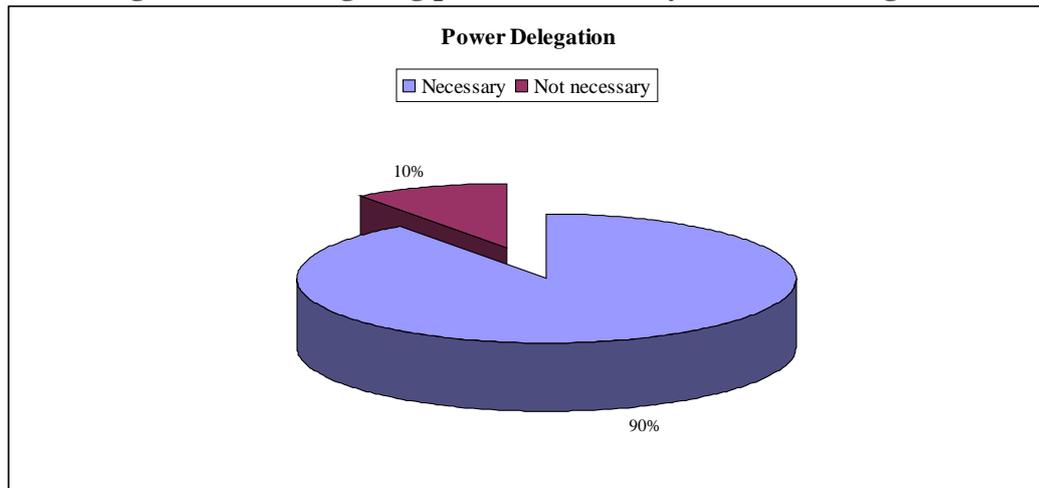
so this may be useful in solving problems before they becomes too difficult. Additionally, one manager said that “I believe that the best way to solve the problem occurring in the workplace is to communicate with employees by talking to them straightforward”. This showed that interviewees may need to be sensible and neutral in listening to issues raised by their employees, and their language and communication should be uncomplicated and easy to understand.

**Figure 20: Is anticipating the market trend a necessary skill for manager?**



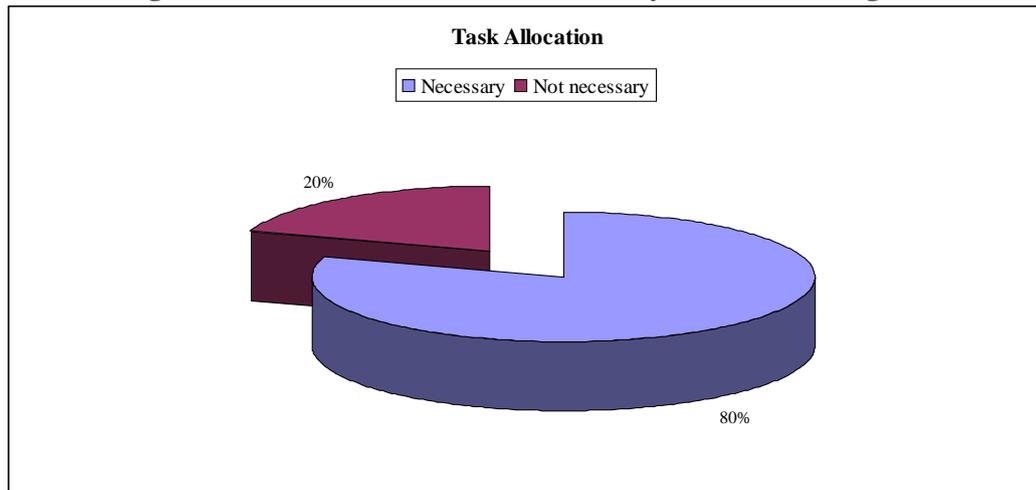
70 per cent of interviewees pointed out that these days the tyre market is highly competitive and changing rapidly; manager should be prepared and able to anticipate what might happen in the near future in order to keep the firm competitive. One manager suggested that it was necessary to keep abreast of current affairs; for example, if a price increase is predicted in raw materials such as rubber or petroleum, the manager should be active in gathering information and anticipating market trends in order to make a decision about stock management.

**Figure 21: Is delegating power a necessary skill for managers?**



90 per cent of interviewees considered that delegating power is a necessary skill; especially in decision making, employees need substantial support from the manager if they are to be confident in the decision-making process. For example, one manager said that “I always give advice to my employees to accomplish their tasks”. This showed that this manager realised that providing support and feedback to the employees is necessary to guide them in completing their tasks. Once having delegated power, the manager should respect the decisions made by employees. Mistakes may occur at first, but later on the employee will learn how to deal with different problems in different situations.

**Figure 22: Is task allocation a necessary skill for managers?**



80 per cent of interviewees emphasised that task allocation is necessary. They generally allocate tasks to specific employees. They emphasised that different employees have different skills; therefore, it is necessary to assign the appropriate task to the each employee.

To maintain productivity, interviewees need to influence their employees' behaviour. For instance, one interviewee emphasised that he usually starts work early, to check and clean everything before the workers arrive, and in order to set a good example of punctuality and responsibility. He said that if one expects his or her employees to perform their tasks effectively, one should first put effort into his or her own work to guide and provide feedback to employees.

Additionally, to enhance the organisation's performance, several interviewees emphasised that they always empower and help employees in overcoming obstacles. For example, if a worker faces a situation that requires further assistance, such as additional technical skills, encouraging employees to deal

with the problem and make decisions by themselves would lead them to develop their confidence and skills.

#### 7.1.2.1 Summary

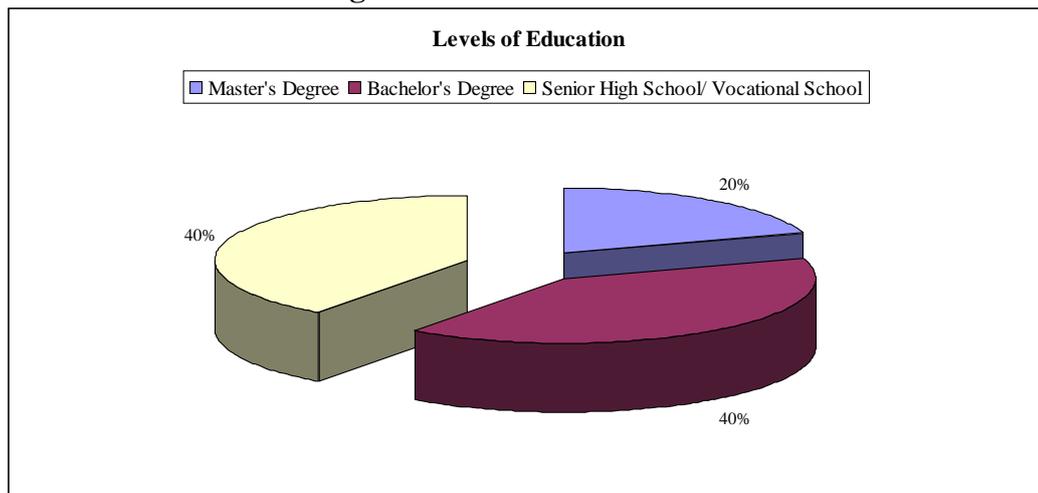
In conclusion, it was found that, in the more effective firms, the roles of managers are related to their ability to cope with conflict among employees, forecasting the current market, delegating power, organising and staffing, and empowering and encouraging employees.

#### **7.1.3 Learning and Experience**

Learning in an organisation requires three areas of consensus: the centrality of environmental alignment; the necessity of individual learning and its transfer to the organisational level; and the priority of maximising the impact of contextual factors such as strategy, structure, and culture (Garratt, 1987). Learning also emphasises five activities: systematic problem solving, experimentation, learning from their own and others' experience, and effective knowledge transfer (Garvin, 1993). Learning therefore plays a major role in the development of the system, while forming the key element in its connectivity (Michie, 2001). In order to create organisational learning within the firm, many researchers have suggested that the manager is one of the most important resources in generating knowledge and transferring or sharing it within the firm (Jumara, 2005). The success or

failure of the firm could therefore depend on how managers devote most of their effort to the performance of their duties. The research questions and objectives aimed to understand the background of each manager interviewed in both more and less effective firms.

**Figure 23: Levels of education**



From the interviews, it was found that two of the interviewees had completed an MBA, four had completed a Bachelor's degree in Engineering, Accounting and Business Administration, and the remaining had completed Senior High School/Vocational School. Basically, most interviewees admitted that their personal interest was clearly the car, so, once graduated, they decided to work in a car-related business area such as an auto-part firm, automobile repair shop or car manufacture. Several had a relatively long experience in the car-related field before running a small tyre firm. Their earlier careers required them to practise a variety of technical skills; for example, some interviewees worked in an auto repair service firm, where their main duties were related to auto-part replacement, stock management and customer service. These functions call for technical skills, so it is necessary to practise, observe and memorise different

techniques to deal with different kinds of problems in diverse cars. For example one respondent said that “I always test new ideas and techniques to see if they work in the real situation”. He also said that in order to improve technical skills “I often share technical techniques and experience among colleagues”.

However, some interviewees replied that they did not have any experience related to this field of business. For instance, one said that “once I graduated with a Bachelor’s degree in Electrical Engineering, I decided to build up my own tyre firm”. He said that “I had got a lot of support from my brother who has his own tyre firm in another city, and that my brother sent me one of the best technicians in his firm”. So this manager had observed and collected a lot of information while working. At the same time, he had learnt various technical skills from the technician.

#### 7.1.3.1 Summary

In the more effective firms, it was found that there are two different groups. One is a group of interviewees who have experience in related auto-part businesses. These interviewees have learnt much about the different technical skills by practising, observing and memorising from different scenarios in the workplace. The other group comprises interviewees who did not have car-related experience; these people learnt from the experience of their own workers in this field of business.

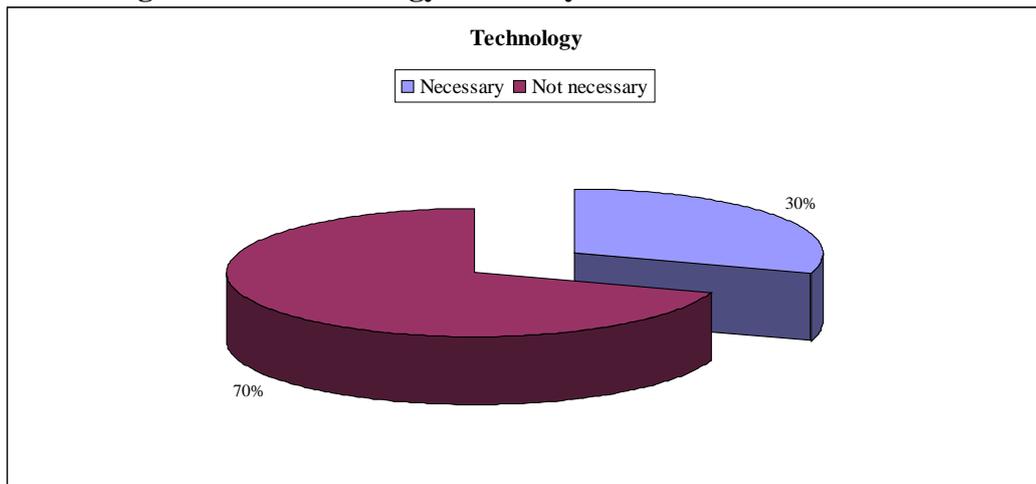
## 7.2 Less Effective Firms

### 7.2.1 Organisational Management

#### 7.2.1.1 Operational Management

##### 7.2.1.1.1 Technology

**Figure 24: Is technology necessary to the success of the firm?**



From the interview, 30 per cent of interviewees said that technology is necessary to a firm's success, and the remainder believed that technology was not necessary to their firm's success. It was found that different interviewees emphasised different perspectives concerning high technology. They gave two main reasons for their attitude. First, the majority of interviewees emphasise that to invest in high technology, such as modern machinery, would significantly increase costs. Instead of using modern machines, these firms mostly work by

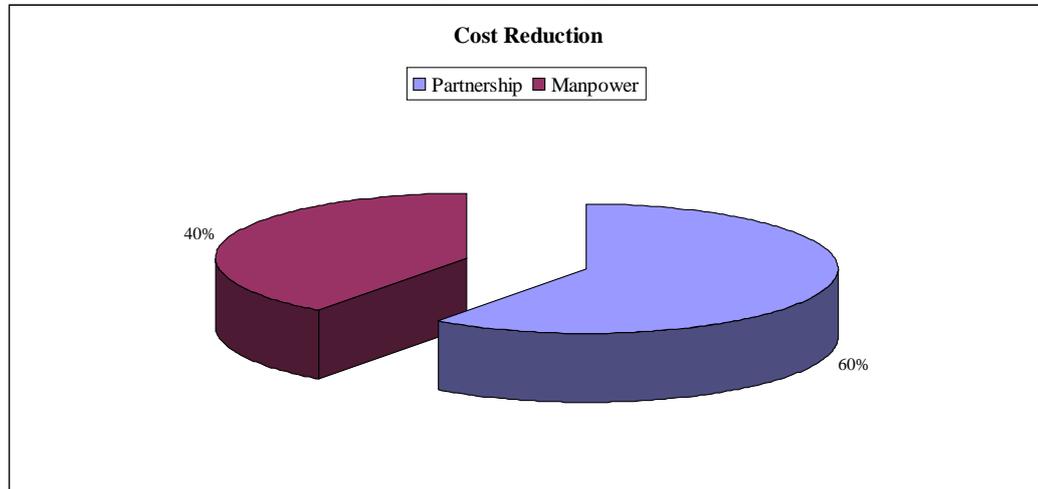
hand, with low technology instruments. This leads to delay in delivery to customers, and when they have a lot of customers waiting for their services, they cannot guarantee precisely when the work can be completed. In addition, some interviewees raised the example of a computer database for collecting customer profiles. Their firms have only a limited number of customers, so they emphasise that it is not necessary to invest in computers to collect customer profiles. Instead they prefer to gather them by writing in the old way.

Second, some interviewees said that they lack the knowledge to integrate high technology into their firms. For example, several emphasised that technical skill is a huge barrier in using modern machinery, because the more sophisticated the machine the more complicated it is to use. They select to serve their customers case by case; if one has a luxury car which has complex elements, they recommend the customer to another shop which can handle modern equipment. Some interviewees also pointed out that language is another obstacle; in order to use most modern machines effectively, users should be able to understand English.

30 per cent said that technology is necessary to the firm's success. They said that they attempted to invest in modern technology to save customers' time and to meet customers' satisfaction.

#### 7.2.1.1.2 Cost Reduction

**Figure 25: What are your strategies for cost reduction?**



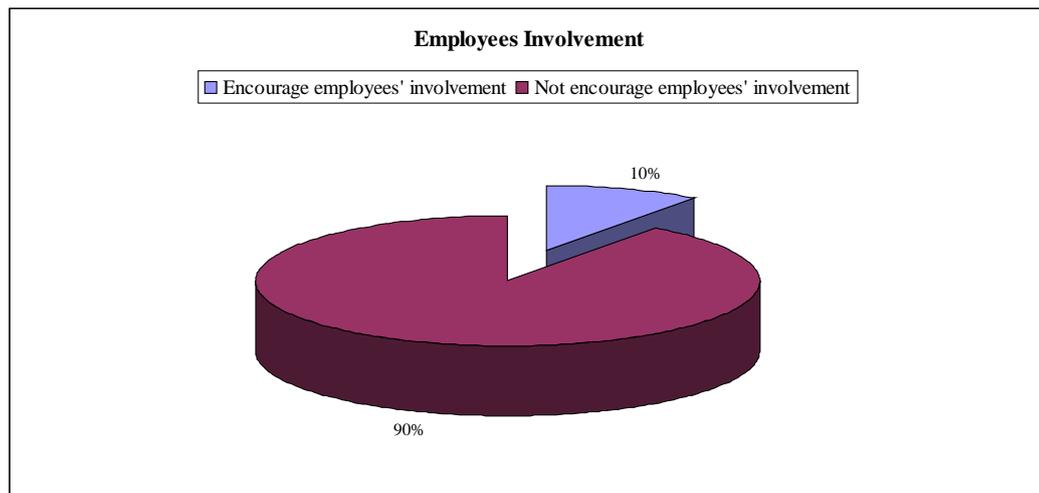
From the interviews, it was found that 60 per cent of interviewees emphasised it was important to have a good relationship with other firms in order to purchase a number of products at any time. This means that those firms who group together or act in partnership will be able to negotiate prices with tyre manufacturers.

Otherwise, 40 per cent of managers interviewed emphasised that in order to reduce costs they use manpower instead of investing in high technology machinery. They stated that they do not plan to expand the business by investing in high technology equipment to increase job efficiency, or purchasing computers to collect customer data. In contrast, by saving costs in this way, they can offer customers low service charges.

## 7.2.1.2 Human Resource Management

### 7.2.1.2.1 Contribution and Job Description

**Figure 26: How do you organise contribution and job description in your firm?**



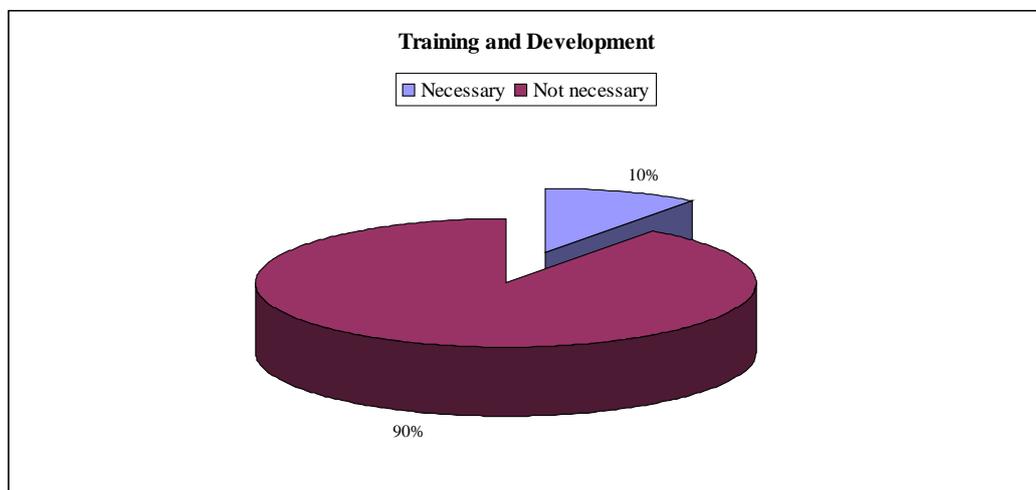
The interviews suggest that the organisational structure is almost the same in every firm. Employees are directly assigned by the interviewees depending on the nature of each task. Once the tasks have been completed, the manager comes to check the quality. 90 per cent of interviewees in the less effective firms believed that they do not encourage their employees to be involved in making day-to-day job decisions because they do not trust their ability to do this. Hence, employees have low involvement in discussing or making decisions on virtually all matters. If there is any problem, the employees must immediately report to the manager. For instance, in the circumstance of negotiating the price of a product or service, the manager is the only one who can offer a discount to the customers. Additionally, most interviewees highlighted that because of the small number of

employees, organisational members should be able to work in any position. They added that they do not have a fixed job description for each position, so a key responsibility is to assign work to their employees.

In contrast, 10 per cent answered that they encourage their employees to be involved in making day-to-day job decisions. They emphasised that contributing authority in making decisions could build up the employees' confidence and this could encourage loyalty and productivity in the workplace.

#### 7.2.1.2.2 Training and Development

**Figure 27: Are training and development necessary to the success of the firm?**



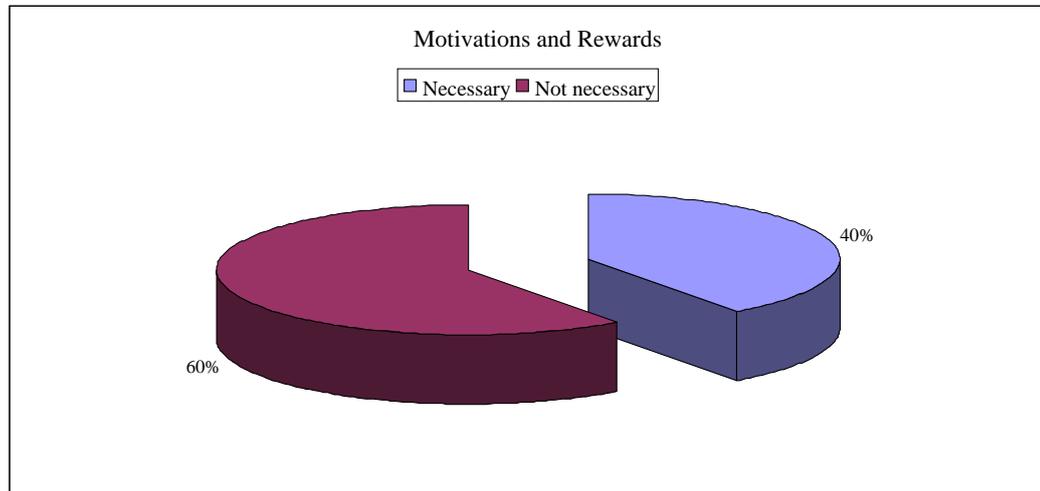
From the interviews, 90 per cent of interviewees said that training and development are not necessary to the firm's success. They are not likely to encourage their employees to participate in any activities or training programmes offered by tyre manufacturers, believing that it is likely that their employees had been trained automatically in practice through the real situation in the workplace.

Some interviewees added that their firms had only a few employees, so it would cause a shortage of labour to send them to participate in activities provided by tyre manufacturers.

In contrast, 10 per cent said that training and development are necessary to the firm's success. They emphasised that training and development are useful tools which need to be considered. One raised an example: after attending several training and development programmes developed by the tyre manufacturer, he gained a lot of information and was clear about using technical terms in explanations to customers. He also emphasised that in the long term, training and development would lead to an increase in the skills of employees.

### 7.2.1.2.3 Motivations and Rewards

**Figure 28: Are motivations and rewards necessary to the success of the firm?**

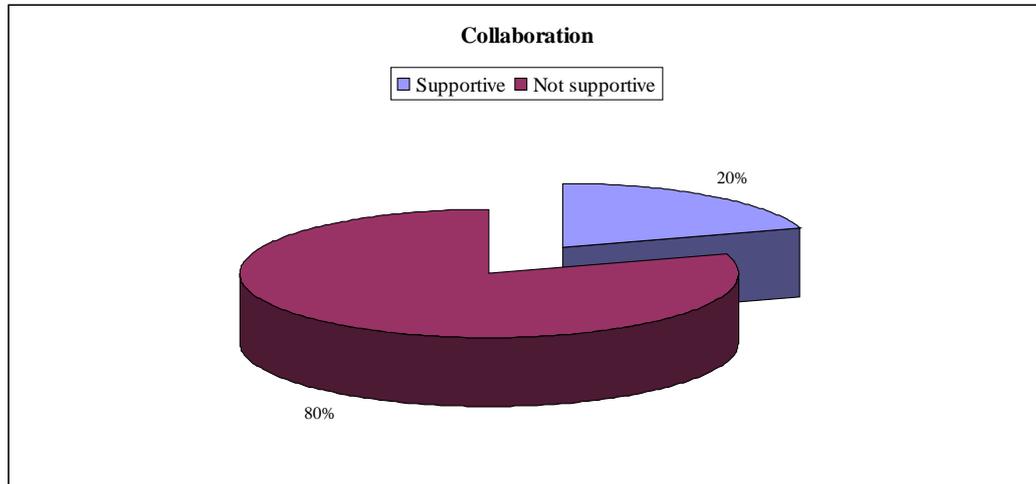


60 per cent of interviewees in the less effective firms said that motivation and rewards systems are not necessary to the success of the firm. The majority stated that their firms only make a small profit per unit, so it is not worth encouraging their employees by using a commission system. Instead, they try to show appreciation for employees' ideas, and recognise their contributions and accomplishments.

40 per cent agreed with rewarding employees who had performed well throughout the year; for example, if one is a hard-working employee, he or she will have the opportunity of an extra vacation with pay during the year.

#### 7.2.1.2.4 Collaboration

**Figure 29: Is collaboration supportive to the success of the firm?**



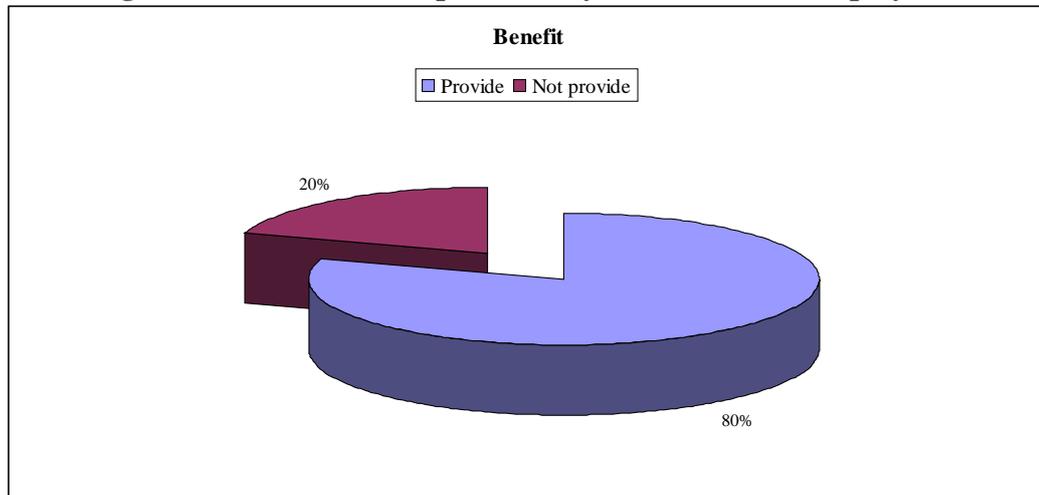
80 per cent of interviewees said collaboration is not supportive to the success of the firm, so they did not place a value on cooperation because they emphasised that if employees were too close to each other, it would be difficult to manage them and might cause problems. For example, if one employee makes a mistake or something is wrong and needs attention in the workplace, other employees may not want to report that matter to the manager. Additionally, they said that they create a competitive environment by encouraging their employees to work out the problems without sharing them with others. Interviewees said that they trusted and respected the ability of their employees because each employee had been working in this business field for a long time.

20 per cent said that collaboration is supportive to the firm's success. They believed that if employees have good teamwork, they will share their techniques

for dealing with different problems that they have faced in the workplace, which could lead to improved productivity within the firm.

#### 7.2.1.2.5 Benefit

**Figure 30: Does the firm provide any benefits to the employees?**



80 per cent of the interviewees said that they provide their employees with standard benefits such as health insurance, lunch and accommodation. However, 20 per cent do not offer any benefits because they emphasise that they provide an appropriate salary.

#### 7.2.1.3 Summary

In conclusion, it was found that nearly all the interviewees in the less effective firms believed that technology is not a key aspect of the firms' success. They do not have adequate knowledge and capital to invest in high technology. Regarding

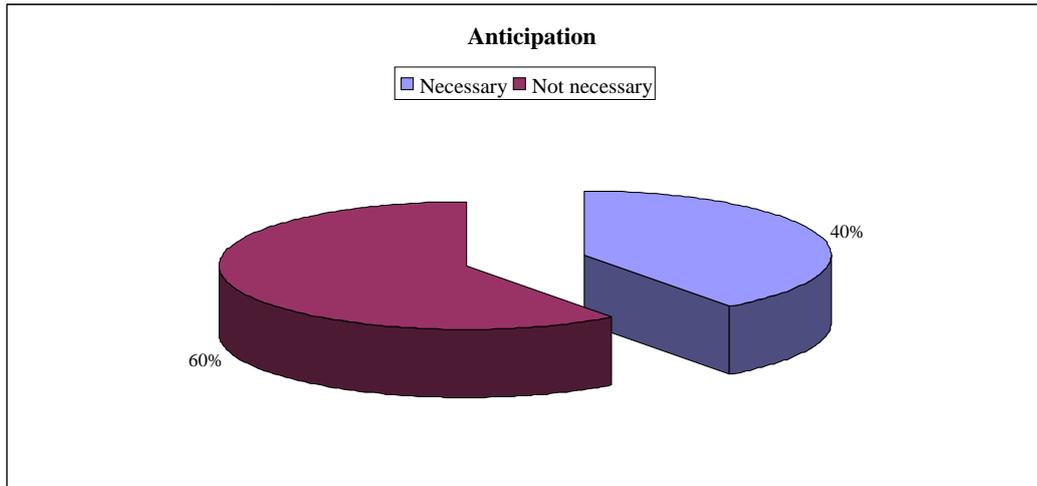
low resources and knowledge, they could not integrate technology to assure the quality of product and service. This leads to losing an opportunity to increase their volumes of sales. In terms of Human Resource Management, the low number of employees and small amount of capital tends to make them discourage their employees from participating in any activity.

### **7.2.2 Leadership Role**

A person who serves as a manager assumes a unique responsibility for work that is accomplished largely through the efforts of other people (Bowditch and Buono, 2001). Consequently, the manager is the person who influences subordinates to accomplish the organisational goals. Different interviewees have different ways of encouraging their subordinates or employees. Therefore, the rationale of the interviews in this section is to understand how interviewees have performed their responsibilities in the organisation and to explain the nature of the Leadership role in the less effective firms.

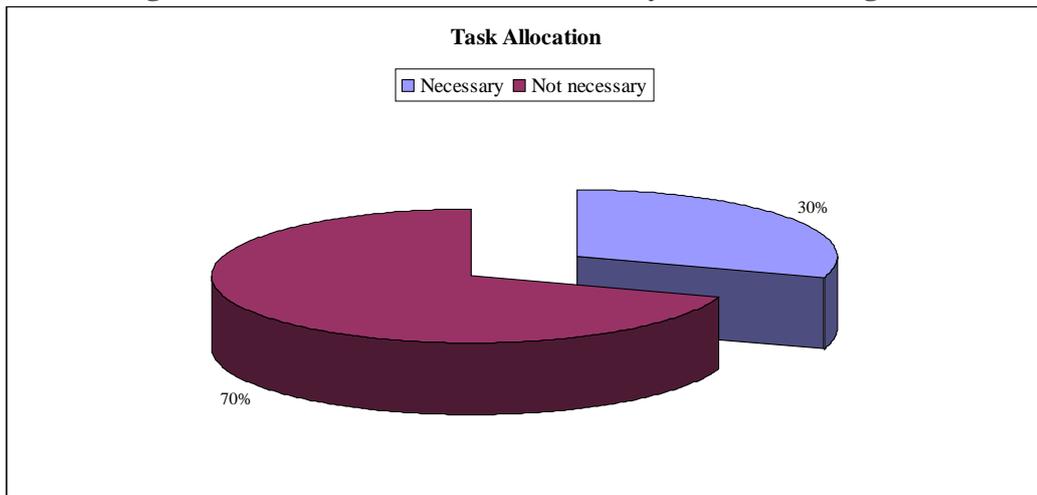
The interviews suggest that a manager in a less effective firm does not have a clear direction for the organisational goals. Most do not establish guidelines for their employees. For example, one supposed that “we believe that we do our best for today, and then we will eventually succeed”. In fact these interviewees do not establish their business strategies in terms of financial planning, human resource management, operational management or stock management.

**Figure 31: Is anticipating the market trend a necessary skill for managers?**



60 per cent of interviewees stated that they do not recommend that anticipation is necessary. They were not aware of market trends and had recently failed to capture the current market, as they had not realised that the price of petroleum had increased. This incident rapidly increased the price of products and transport, so they could not avoid increasing the price of their firm's products and services. In the long run, this crisis led them to lose an opportunity to increase sales.

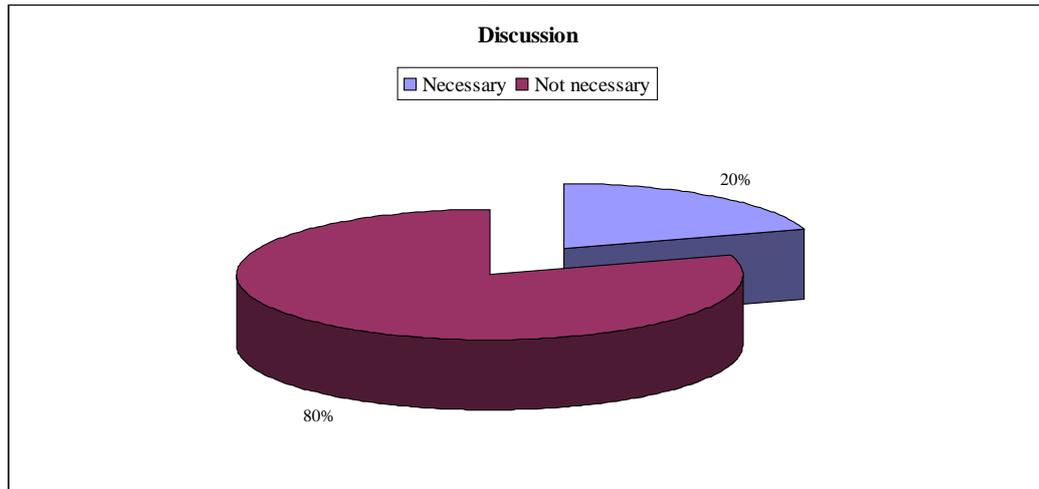
**Figure 32: Is task allocation a necessary skill for managers?**



70 per cent of interviewees emphasised that task allocation is not a necessary skill for the manager. They generally do not allocate an exact position to their

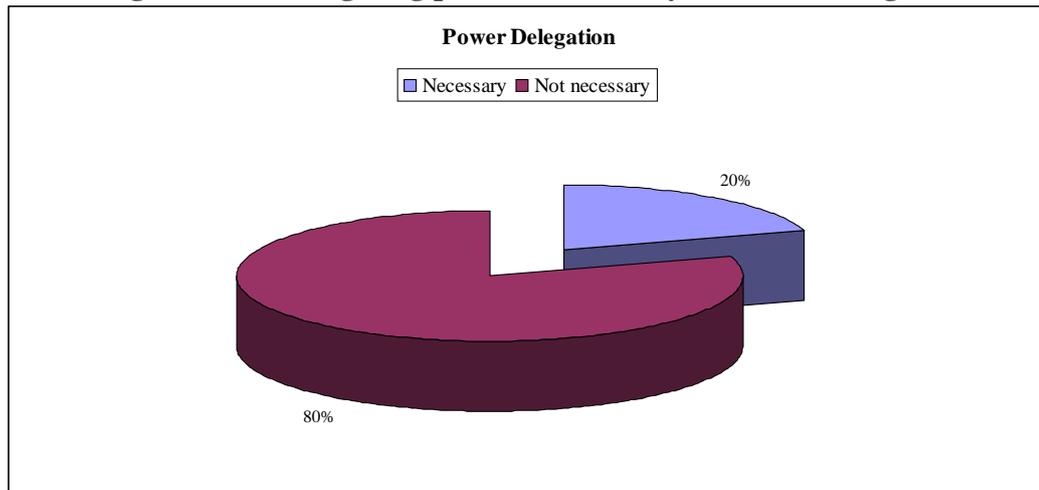
employees because they emphasise that everyone is supposed to be able to work in any position. They said that the employees in their firm can substitute any position, such as changing tyres, wheel alignment, and balancing.

**Figure 33: Is discussion with employees a necessary skill for managers?**



Interviews suggested that 80 per cent of interviewees in the less effective firms prefer not to spend time in discussion with their employees; they presume that nearly all their employees had practised in the real situation of the workplace, so it was not necessary to waste time in further discussion. Nor did they encourage good relationships among employees because they emphasised that good quality of work should be produced from the experience of each worker, not from working as a team. For example, one respondent said that “I would not discuss with my employees about the way they work because I believe that my employees should be the best people who know well how to work”. This implied that this manager may not be able to assist his employees in time if there is any problem. Also, it may be difficult for the employees to develop their skills since their manager does not pay special attention to guide them.

**Figure 34: Is delegating power a necessary skill for managers?**



To avoid mistakes, 80 per cent of interviewees said that they preferred not to delegate power to employees. They remain the only ones who make decisions in every situation. For example, if the customers ask for a discount, the employees should come to the manager to consider how much discount to offer. For example, one manager said that “the employees should only do what they had been assigned”. This showed that the manager in this firm is not likely to support and encourage his employees to contribute generative ideas within the workplace.

Interviewees in this business group are more likely to encourage their employees through competition rather than collaboration. They emphasised that competition among employees could create strength in their firms, reducing dishonesty and accelerating the working period. Several managers interviewed raised an interesting point, that there are two main groups of employees in their firms; if one is not working hard enough, a member of another team would come to report this.

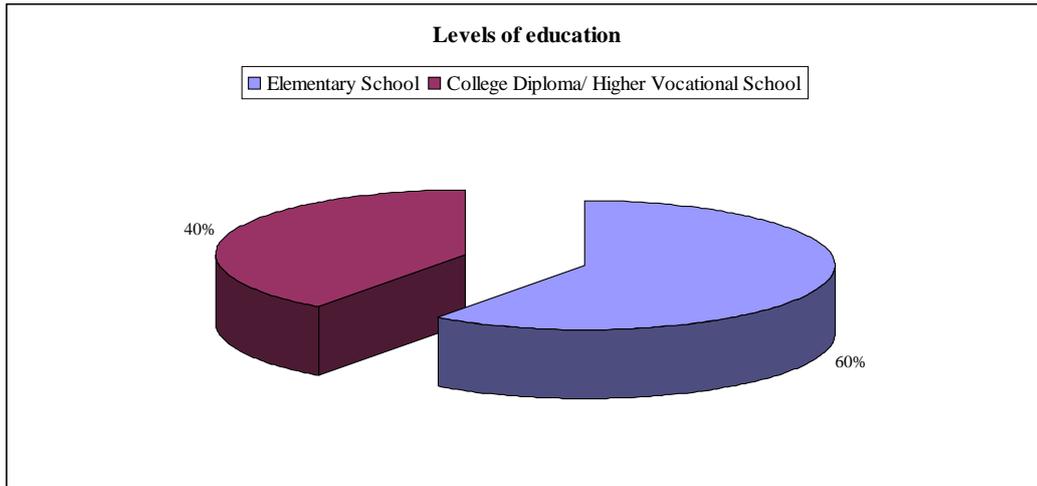
### 7.2.2.1 Summary

In conclusion, in the less effective firms, the interviews suggest that most interviewees do not establish goals and general guidelines for their employees; and they do not attempt to understand employees' problems. Instead, most interviewees are more likely to be self-centred and prefer not to listen to others. Relevant issues are not raised or openly discussed. Moreover, they do not concentrate on task-oriented functions such as planning and scheduling the work, coordinating subordinates' activities, or providing necessary supplies and technical assistance.

### **7.2.3 Learning and Experience**

A major way to acquire knowledge is through experience. Both organisations and managers can study in this manner (Pedler et al., 1997) and they can learn to avoid past mistakes where they have to engage in immense efforts of redirection because change was belated (Hitt et al., 1999). In this section, Learning and Experience in the less effective firms have been derived from different ways such as learning by doing, observing and imitating others. Most managers interviewed had previous work experience related to technical skills, with the ability to perform specialised tasks. Such ability derives from knowledge or expertise gained from education or experience. The purpose of this interview was to understand how the managers interviewed apply experience in order to optimise the performance of their duties.

**Figure 35: Levels of education**



From the interviews, it was found that 60 per cent of interviewees had completed Elementary School. They had strong technical skills in this business area because most of them had formerly worked as technical people with car manufacturers, small tyre firms and car maintenance shops. Due to financial problems in childhood, these interviewees could not afford to pursue higher education, so they decided to leave school and start working as a technician in a car-related field at a very young age. They then acquired a lot of technical skills through on-the-job experience. They experienced different kinds of problems, which helped them to learn various techniques by themselves, and how to solve difficult tasks which require strong technical skills. The majority said that they generally preferred to learn how to solve complex problems themselves, by doing. It is likely that they are patient in completing difficult tasks which consume a lot of time.

40 per cent of the interviewees had completed College Diploma and Higher Vocational School. All of them had former experience in a car-related field. After graduating they worked in the car business, for example in tyre or auto-part

firms. They had former experience related to this business field. One manager emphasised that “I preferred to spend my time developing my knowledge and technical skills by reading books, newspapers, and automobile magazines. I preferred to transfer and apply new knowledge, learnt from different sources, to my employees”. He also said that “I don’t like to go out to the crowded area or participate in any activities with others”. So, it was obvious that he is not a sociable person, scarcely ever participating in the activities offered by the tyre manufacturers. In addition, one respondent said that “normally, when problems occur in my workplace, I carefully select the best way to solve them by looking at the sources of the problems”. This implied that this manager may require a certain period of time to resolve problems because he is very thoughtful and hypothetical in finding the way to approach problems.

#### 7.2.3.1 Summary

In this section, it was found that there were two different groups, composed of interviewees who had completed only Elementary School, and those who had completed College Diploma/Higher Vocational School. The first group has strong technical skills in a car-related field because they started working as technicians when they were very young. They prefer to solve problems by trying to do it by themselves, and are noticeably patient in completing difficult tasks. In contrast, the other group tried to avoid participating in activities offered by the tyre manufacturers, instead spending their time in reading books, newspapers, and vehicle magazines to improve their knowledge and skills.

## **8. Discussion**

It is clear that there are differences in terms of management style between interviewees in the more effective firms and those in the less effective firms. The interviewees in the more effective firms are more aware of the highly competitive nature of today's business, and put effort into investing in high technology and developing employees' skills. Conversely, the interviewees in the less effective firms are not familiar with complicated structures or high technology. They prefer to work in the old way, refusing to accept changes within their organisation, and they fail to persuade their employees to work at their best, tending not to provide effective activities to develop their employees' skills.

Further, in the more effective firms, the roles of interviewees are related to their ability to cope with conflict among employees, forecasting the current market, delegating power, organising and staffing, and empowering and encouraging employees. For example, one manager said that "I believe that the best way to solve the problem occurring in the workplace is to communicate with employees by talking to them straightforward". This is also consistent with the statement of the Transformational leadership that managers are supposed to communicate with employees by using uncomplicated language.

On the other hand, in the less effective firms, interviewees tend not to listen to employees' problems. Moreover, they concentrate on performance rather than on

task-oriented functions such as planning and scheduling the work, coordinating subordinates' activities, or providing necessary supplies and technical assistance. For example, one manager said that "I would not discuss with my employees about the way they work because I believe that my employees should be the best people who know well how to work". This is consistent with one of the elements of Laissez-faire leadership that managers prefer to let their employees do the tasks in the way the employees prefer.

Furthermore, in the more effective firms, most interviewees are relatively well educated; several have technical experience from previous work and some have learnt by observing their colleagues; some interviewees prefer to test their ideas and techniques in the workplace to see if they work. For example, one manager said that "I always test new ideas and techniques to see if they work in the real situation". This is also consistent with one of the components of Pragmatist that they are likely to try out their ideas, theories and techniques to see if they work in practice.

On the other hand, some interviewees in the less effective firms have a relatively low level of education, and some are moderately well educated, but nearly all have a lot of work experience. Most of them started their careers at an early age, in businesses related to this field. First-hand experience is the method they use to improve their skills. However, some interviewees try to solve problems step by step. For example, one respondent said that "normally, when the problems occur in my workplace, I carefully select the best way to solve them by looking at the

sources of problems”. This is also consistent with one of the elements of Theorist that this type of person is likely to solve problem in a rational and logical manner.

In summary, interviewees in the more effective firms tend to be energetic in trying out new ways of operating and managing their organisations. They are well organised in setting organisational goals and generating general guidelines for their employees. They are also more open to discussing employees’ problems. Hence, this may emphasise that the interviewees in the more effective firms are likely to be related to Transformational leadership. In relation to their learning style, they tend to learn by observing and practicing, so this may show that the manager in the more effective firm are likely to be related to Pragmatist learning style. In contrast, interviewees in the less effective firms are more likely to be self-centered. They are likely to be inactive and avoid assisting their employees related to one of the element of Laissez-faire leadership. In relation to their learning styles, with first-hand experience, they are likely to learn by doing which is related to one of the element of the Activist learning style. Therefore, this may suggest that qualitative and quantitative results are relatively consistent.

## **9. The independent samples t-test**

The t-test is one of the best known tests for comparing two samples when the sample sizes are small or less than 30. The independent samples t-test is undertaken when the samples are unrelated, with different participants in each

sample (Hinton et al., 2004). If the two groups perform differently then it can be attributed the difference to the effect of the manipulation. In this section, the independent sample t-test has been used to test whether the variables in organisational management, leadership role, learning and experience impact on the organisational effectiveness.

### 9.1 Control Variables (Learning and Experience)

**Table 27: Number of Employees**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |                 |
|-------------------------|---|------------------------------|-----------------|
|                         | Sig                                     | Sig (2-tailed)               | Mean Difference |
| Equal variances assumed | 0.212                                   | 0.000                        | 32.19           |

Levene's Test for Equality of Variances indicates that P-Value = 0.212, which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P-Value = 0.000 which is lower than 0.05; therefore, the null hypothesis is rejected; there is significant difference between number of employees and Organisational Effectiveness. Further, the mean difference between the two groups is 32.19. Hence, it could be supposed that the more effective firm is more likely to be related to number of employees than is the less effective firm. Therefore, it was found that number of employees impacts on organisational effectiveness.

**Table 28: Gender**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |
|-------------------------|---|------------------------------|
|                         | Sig                                     | Sig (2-tailed)               |
| Equal variances assumed | 0.612                                   | 0.342                        |

H<sub>0</sub>:  $\sigma^2_{\text{male manager}} = \sigma^2_{\text{female manager}}$ , there is no significant difference between the variance of male and female managers.

H<sub>1</sub>:  $\sigma^2_{\text{male manager}} \neq \sigma^2_{\text{female manager}}$ , there is significant difference between the variance of male and female managers.

Levene's Test for Equality of Variances indicates that P-Value = 0.612 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

H<sub>0</sub>: There is no significant difference between male and female.

H<sub>1</sub>: There is significant difference between male and female.

Independent Samples T-Test shows that P- Value = 0.342 which is greater than 0.05; therefore, the null hypothesis is accepted; there is no significant difference between male and female. Hence, it can be concluded that gender does not impact on organisational effectiveness.

**Table 29: Age, Experience Lengths and Educational Levels (N=20)**

| Variables          | Mean |
|--------------------|------|
| Age                | 43   |
| Experience Lengths | 17   |
| Educational Levels | 12   |

Table 29 indicates means of interviewees' age, length of experience and level of education. Each independent variable has been categorised into two groups. First, the interviewees whose ages are 43 years and above are classified into a group of older managers, and the remainder as younger managers. Second, the interviewees with experience of 17 years or more are classified as longer experience managers and the remainder as shorter experience managers. Last, the interviewees whose educational levels are 12 years or more are categorised into a group of higher education, and the remainder into a group of lower education.

**Table 30: Age**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |
|-------------------------|---|------------------------------|
|                         | Sig                                     | Sig (2-tailed)               |
| Equal variances assumed | 0.609                                   | 0.732                        |

Levene's Test for Equality of Variances indicates that P-Value = 0.609 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P- Value = 0.732 which is greater than 0.05; therefore, the null hypothesis is accepted; there is no significant difference between the older and the younger managers. Hence, we find that age does not impact on organisational effectiveness.

**Table 31: Experience**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |
|-------------------------|---|------------------------------|
|                         | Sig                                     | Sig (2-tailed)               |
| Equal variances assumed | 0.809                                   | 0.268                        |

Levene's Test for Equality of Variances indicates that P-Value = 0.809 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P- Value = 0.268 which is greater than 0.05; therefore, the null hypothesis is accepted; there is no significant difference between longer and shorter experience managers. Hence, experience does not impact on organisational effectiveness.

**Table 32: Education**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |
|-------------------------|---|------------------------------|
|                         | Sig                                     | Sig (2-tailed)               |
| Equal variances assumed | 0.813                                   | 0.713                        |

Levene's Test for Equality of Variances indicates that P-Value = 0.813 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P- Value = 0.713 which is greater than 0.05; therefore, the null hypothesis is accepted; there is no significant difference between interviewees with higher and lower levels of education. Hence, it was found that levels of education do not impact on organisational effectiveness.

### 9.1.1 Summary

**Table 33: The relationship between learning and experience and organisational effectiveness**

| Variables           | Relationship to Organisational Effectiveness |
|---------------------|--|
| Number of Employees | Significantly related                        |
| Gender              | Not significantly related                    |
| Age                 | Not significantly related                    |
| Experience          | Not significantly related                    |
| Education           | Not significantly related                    |

In summary, nearly all of the control variables are not statistically significantly related to Organisational Effectiveness. Number of employees is the only variable in this group that is significantly related to Organisational Effectiveness.

### 9.2 Organisational Management

**Table 34: Technology**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |                 |
|-------------------------|---|------------------------------|-----------------|
|                         | Sig                                     | Sig (2-tailed)               | Mean Difference |
| Equal variances assumed | 0.767                                   | 0.020                        | 18.25           |

Levene's Test for Equality of Variances indicates that P-Value = 0.767 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P-Value = 0.020 which is lower than 0.05; therefore, the null hypothesis is rejected; there is significant difference between technology and organisational effectiveness. Further, the mean difference between the two groups is 18.25. Hence, it could be supposed that the

more effective firm is more likely to be related to technology than the less effective firm. Therefore, the results suggest that technology impacts on organisational effectiveness.

**Table 35: Contribution and Job Distribution**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |                 |
|-------------------------|---|------------------------------|-----------------|
|                         | Sig                                     | Sig (2-tailed)               | Mean Difference |
| Equal variances assumed | 0.827                                   | 0.000                        | 27.90           |

Levene's Test for Equality of Variances indicates that P-Value = 0.827 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P- Value = 0.000 which is lower than 0.05; therefore, the null hypothesis is rejected; there is significant difference between the contribution and job distribution and organisational effectiveness. Further, the mean difference between the two groups is 27.90. Hence, it could be supposed that the more effective firm is more related to contribution and job distribution than the less effective firm. Hence, the results suggest that contribution and job distribution impact on organisational effectiveness.

**Table 36: Training and Development**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |                 |
|-------------------------|---|------------------------------|-----------------|
|                         | Sig                                     | Sig (2-tailed)               | Mean Difference |
| Equal variances assumed | 0.242                                   | 0.001                        | 24.17           |

Levene's Test for Equality of Variances indicates that P-Value = 0.242 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P- Value = 0.001 which is lower than 0.05; therefore, the null hypothesis is rejected; there is significant difference between training and development and organisational effectiveness. Further, the mean difference between the two groups is 24.17. Hence, it could be supposed that the more effective firm is more related to training and development than the less effective firm. Therefore, the results suggest that training and development impact on organisational effectiveness.

**Table 37: Motivation and Reward**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |
|-------------------------|---|------------------------------|
|                         | Sig                                     | Sig (2-tailed)               |
| Equal variances assumed | 0.782                                   | 0.055                        |

Levene's Test for Equality of Variances indicates that P-Value = 0.782 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P- Value = 0.055 which is greater than 0.05; therefore, the null hypothesis is accepted; there is no significant difference

between motivation and reward and organisational effectiveness. Hence, the interviews found that motivation and reward do not impact on organisational effectiveness.

**Table 38: Collaboration**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |                 |
|-------------------------|---|------------------------------|-----------------|
|                         | Sig                                     | Sig (2-tailed)               | Mean Difference |
| Equal variances assumed | 0.383                                   | 0.000                        | 26.94           |

Levene's Test for Equality of Variances indicates that P-Value = 0.383 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P- Value = 0.000 which is lower than 0.05; therefore, the null hypothesis is rejected; there is significant difference between collaboration and organisational effectiveness. Further, the mean difference between the two groups is 26.94. Hence, it could be supposed that the more effective firm is more related to collaboration than the less effective firm. Therefore, the interviews suggested that collaboration impacts on organisational effectiveness.

**Table 39: Benefit**

|                             | Levene's Test for Equality of Variances | T-test for Equality of Means |
|-----------------------------|---|------------------------------|
|                             | Sig                                     | Sig (2-tailed)               |
| Equal variances not assumed | 0.005                                   | 0.589                        |

Levene's Test for Equality of Variances indicates that P-Value = 0.005 which is lower than 0.05. Hence, the null hypothesis is rejected. As a result, the hypothesis will be tested by the Equal Variance Not Assumed method.

Independent Samples T-Test shows that P- Value = 0.589 which is greater than 0.05; therefore, the null hypothesis is accepted; there is no significant difference between benefit and organisational effectiveness. Therefore, the results suggest that benefit does not impact on organisational effectiveness.

### 9.2.1 Summary

**Table 40: The relationship between organisational management and organisational effectiveness**

| Variables                        | Relationship to Organisational Effectiveness |
|----------------------------------|--|
| Technology                       | Significantly related                        |
| Contribution and Job Description | Significantly related                        |
| Training and Development         | Significantly related                        |
| Motivation and Reward            | Not significantly related                    |
| Collaboration                    | Significantly related                        |
| Benefit                          | Not significantly related                    |

In summary, the results suggest that several of our exploratory variables are indeed statistically significant in relation to Organisational Effectiveness.

### 9.3 Leadership Role

**Table 41: Discussion**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |                 |
|-------------------------|---|------------------------------|-----------------|
|                         | Sig                                     | Sig (2-tailed)               | Mean Difference |
| Equal variances assumed | 0.383                                   | 0.000                        | 26.94           |

Levene's Test for Equality of Variances indicates that P-Value = 0.383 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P-Value = 0.000 which is lower than 0.05; therefore, the null hypothesis is rejected; there is significant difference between discussion and organisational effectiveness. Further, the mean difference between the two groups is 26.94. Hence, it could be supposed that the more effective firm is more related to discussion than the less effective firm. Hence, results suggest that discussion impacts on organisational effectiveness.

**Table 42: Anticipation**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |
|-------------------------|---|------------------------------|
|                         | Sig                                     | Sig (2-tailed)               |
| Equal variances assumed | 0.253                                   | 0.168                        |

Levene's Test for Equality of Variances indicates that P-Value = 0.253 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P- Value = 0.168 which is greater than 0.05; therefore, the null hypothesis is accepted; there is no significant difference between anticipation and organisational effectiveness. Hence, the results suggest that anticipation does not impact on organisational effectiveness.

**Table 43: Power Delegation**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |                 |
|-------------------------|---|------------------------------|-----------------|
|                         | Sig                                     | Sig (2-tailed)               | Mean Difference |
| Equal variances assumed | 0.714                                   | 0.000                        | 25.32           |

Levene's Test for Equality of Variances indicates that P-Value = 0.714 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P- Value = 0.000 which is lower than 0.05; therefore, the null hypothesis is rejected; there is significant difference between power delegation and organisational effectiveness. Further, the mean difference between the two groups is 25.32. Hence, it could be supposed that the more effective firm is more related to power delegation than the less effective firm. Hence, it was found that power delegation impacts on organisational effectiveness.

**Table 44: Task Allocation**

|                         | Levene's Test for Equality of Variances | T-test for Equality of Means |                 |
|-------------------------|---|------------------------------|-----------------|
|                         | Sig                                     | Sig (2-tailed)               | Mean Difference |
| Equal variances assumed | 0.767                                   | 0.020                        | 18.25           |

Levene's Test for Equality of Variances indicates that P-Value = 0.767 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

Independent Samples T-Test shows that P- Value = 0.020 which is lower than 0.05; therefore, the null hypothesis is rejected; there is significant difference between task allocation and organisational effectiveness. Further, the mean difference between the two groups is 18.25. Hence, it could be supposed that the more effective firm is more related to task allocation than the less effective firm. Therefore, the interviews found that task allocation impacts on organisational effectiveness.

### 9.3.1 Summary

**Table 45: The relationship between Leadership role and organisational effectiveness**

| Variables        | Relationship to Organisational Effectiveness |
|------------------|--|
| Discussion       | Significantly related                        |
| Anticipation     | Not significantly related                    |
| Power Delegation | Significantly related                        |
| Task Allocation  | Significantly related                        |

In summary, the interviews found that nearly all exploratory variables are indeed statistically significant in relation to Organisational Effectiveness.

## **10. Conclusion**

The major findings of this chapter relate to the sample group of managers interviewed to discover the factors which support Organisational Effectiveness. Three main areas – organisational management, leadership role, and learning and experience – have been studied to explore the important factors. Subsequently, these important factors were statistically tested to verify whether they are significantly related to Organisational Effectiveness.

### **- Control Variables (Learning and Experience)**

In terms of learning and experience, it was found that number of employees is significantly related to Organisational Effectiveness. However, gender, age, experience and education are not significantly related to Organisational Effectiveness.

### **- Organisational Management**

The results show that technology, contribution and job description, training and development, and collaboration are significantly related to Organisational Effectiveness. However, motivation and benefits are not significantly related to Organisational Effectiveness. Further, in order to manage firms more effectively, it appears that technology, contribution and job description, training and development, and collaboration should be considered.

- Leadership Role

It was found that discussion, power delegation, and task allocation are significantly related to Organisational Effectiveness, unlike anticipation of market trends. In order to improve and maintain productivity, managers should consider spending time in discussion with employees, delegating power to employees, and allocating appropriate tasks to the right employees.

The next chapter summarises the findings analysed in this thesis as well as offering the discussion.

# **CHAPTER 7 DISCUSSION OF RESEARCH FINDINGS**

## **1. Introduction**

This section discusses the findings of both quantitative and qualitative approaches.

## **2. Discussion of Research Findings of the Quantitative Approach**

In this section, the findings discussed cover the independent and dependent variables: the number of employees, demographics of respondents, learning styles, leadership styles and organisational effectiveness.

### **2.1 Number of Employees**

The results of t-tests suggest that Number of Employees has a positive significant correlation to Activist and Pragmatist learning styles (see Table 36 in appendix D). Additionally, the small firm has a positive correlation with Activist, while the large firm has a positive correlation with Pragmatist. It was found that there was no correlation between Number of Employees and either Reflector or Theorist. However, the results of Pearson's correlation suggest that Number of Employees has a weak negative correlation with Activist, and it has a medium positive

correlation with Pragmatist (see Table 52 in appendix I). This finding suggests that the firm with a high number of employees tends not to have a manager interviewed whose learning style is more related to Activist; and that the firm which has a high number of employees tends to have a manager interviewed whose learning style is more related to Pragmatist. This is in contrast to the small firms, where our results suggest that the interviewees are more likely to be related to Activist.

To elaborate further, according to Honey and Mumford (1992), the Activist manager prefers to act rather than listen. In the small firm, with few employees, diversity of new knowledge and ideas may likewise be limited; managers interviewed may find it challenging to gather knowledge and ideas to transfer to their employees. In contrast, in the large firm, the higher number and diversity offered by different employees may help to generate new ideas, enabling managers to develop and put them into practice to increase the level of productivity. This is consistent with the definition of Pragmatists, who prefer to perform and try out techniques which they think may be valuable (Honey and Mumford, 1992).

Moreover, this is consistent with the concepts of RBV; Wright et al. (2001) suggested that it is necessary for firms to sustain human skills which are difficult to imitate in order to gain competitive advantage. It is possible that a firm with a high number of employees may have an advantage in coming up with a lot of different ideas, which would be helpful in creating a learning environment and

thus would help the manager interviewed in a large firm with the Pragmatist learning style, who is likely to try out new techniques and ideas to see if it turns out well in the workplace, to make it different in terms of transferring knowledge with different approaches to enhance employees' skills. In addition, the t-test results suggest that Number of Employees did not have a correlation with any of the three leadership styles.

However, the results of Pearson's correlation did suggest that Number of Employees has a medium positive correlation with Transformational leadership (see Table 53 in appendix I), suggesting that firms with a high number of employees tend to have managers interviewed whose leadership style is more related to the Transformational. Bass (1985a) and Bass and Avolio (1989) proposed that Transformational leadership is more effective in terms of creating a conducive learning environment and change, compared to the other leadership styles. The resources accessible in a large firm may provide greater opportunity for managers interviewed to encourage a learning environment than in a small firm. As such, managers interviewed in small firms may find their limited resources make it particularly challenging in terms of encouraging learning for their employees.

In addition, Barney (1991) and Lengnick-Hall et al. (2009) proposed that RBV could help firms in making the best use of resources, and SHRM can help in enhancing employees' skills, and consequently increasing productivity; it can be seen that Transformational leadership is associated with the number of

employees. It is possible that a firm with a high number of employees would be able to provide managers interviewed with enough resources in the sense that the managers interviewed with a Transformational leadership style would be able to take advantage of resources to encourage, empower and transfer knowledge to their employees to complete the tasks successfully.

The results of Pearson's correlation also suggest that the number of employees has a medium positive correlation with Organisational Effectiveness (see Table 54 in appendix I), suggesting that the more employees, the higher the levels of organisational effectiveness the firm is likely to achieve. This is supported in previous studies which have found that the number of employees may have both positive and negative correlations with a firm's performance in different industries (Arocena et al., 2007; Yu-Ching et al., 2006). In addition, it is possible that in the small tyre firm the number of employees plays a vital role in increasing levels of learning, and this in turn could improve organisational effectiveness.

## **2.2 Gender**

The results of the t-test suggest that female managers have a positive correlation with Activist, more so than male managers (see Table 37 in appendix I). In contrast, male managers are more likely to be related to Reflector and Theorist, implying that they are cautious and more attached to the theoretical aspects of management or the system (Honey and Mumford, 1992). Our findings are also

consistent with those of Heffeler (2001), who found that gender and learning styles tend to be significantly related. In the data collected, it was not found that there was any correlation between gender and either any of the three leadership styles or Organisational Effectiveness. This implies that gender is not directly related to leadership styles or Organisational Effectiveness. As such, our findings are inconsistent with the studies of Bass et al. (1996). In addition, Collins-Dodd et al. (2004) found that Gender is significantly correlated with Organisational Effectiveness, although Coleman (2007) found that Gender is not significantly correlated with Organisational Effectiveness. Hence, it can be concluded that female and male managers are not different in terms of enhancing Organisational Effectiveness. Furthermore, in this study, it was found that there was no correlation between gender and any of the three leadership styles or Organisational Effectiveness (see Table 49 in appendix I). It is possible that a sample size may be too small to detect correlation among those variables. Subsequently, it may be useful for future research to collect data from a larger number of respondents.

### **2.3 Age**

The results of ANOVA suggest that Age has a significant correlation with Theorist. More specifically, Group 3 (Old) is more likely to be related to Theorist than are the other groups (see and Table 40 in appendix I). This result is consistent with the results of Pearson's correlation, which indicates that there is a

weak positive correlation between Age and Theorist. The findings imply that interviewees aged 54 years old and above are more likely to fall into the learning style category of Theorist; they tend to be skillful at conceptualising and likely to solve problems by first identifying the original cause of the problem itself. Rationally, the older managers interviewed may have observed or practised skills and knowledge throughout different stages of their life, and it is possible that the experience they have gained helps them to be good at identifying the sources of problems. In addition, our findings are consistent with the studies of Severiens and Dam (1997) who found that Age and learning styles of the respondents are significantly correlated.

The results suggested that there were no correlation between Age and either any of the three leadership styles or Organisational Effectiveness (see Table 49 in appendix I). In terms of Age and leadership styles, our findings are inconsistent with current studies carried out in UK industry which have mostly found that Age is directly related to the leadership styles of managers (Oshagbemi, 2008). Similarly, for Age and Organisational Effectiveness, our findings are inconsistent with the studies of Wiersema and Bantel (1992), which suggest that the age of managers in US industry is significantly correlated to corporate strategic change, which in turn helps improve Organisational Effectiveness. Hence, it is possible to conclude that different industries, organisations, and countries may have different cultures as suggested by Hofstede (1980, 1993) which may be influenced on beliefs and this may lead to produce different results. In particular, in Thai culture seniority is important and youth is supposed to respect older

people. However, this does not mean that the age of managers interviewed is related to their leadership styles or Organisational Effectiveness. So, the Age of the manager interviewed is not the contingent variable to verify the leadership styles of the managers interviewed or the Organisational Effectiveness of each firm.

## **2.4 Education**

The results of ANOVA suggest that there is a negative correlation between Education and Activist (see Table 42 in appendix I). More specifically, interviewees who completed Senior High School/Vocational School are less likely to be related to Activist than are the other groups. It is possible that the interviewees who have not achieved a high level of education may be of the Activist type, as they are likely to approach any problems or situations by applying their experience or learning by doing. Our results are consistent with the findings of Furnham (1992), that respondents with different educational backgrounds are correlated with different learning styles. Nevertheless, the results of Pearson's correlation suggest that there is no correlation between Education and learning styles.

The results of ANOVA do suggest that there is a positive correlation between Education and Transformational leadership (see Table 44 in appendix I). This indicated that the level of education of the manager may maintain a Transactional Leadership style. In particular, the manager interviewed who completed Senior

High School/Vocational School is more likely to fall into the category of Transformational leadership. Bass (1997) proposed that managers with predominantly Transformational leadership tend to focus on higher motivational development and increase their employees' motivation levels via inspiring visions of the future. Hence, it is possible that interviewees with Senior High School/Vocational School qualifications tend to motivate their employees by encouraging them to learn, in addition to transferring their knowledge to their employees in order to generate productivity. However, the results of Pearson's correlation suggest that there is no significant correlation between Education and leadership styles (see Table 53 in appendix I). This confirmed that level of education of the interviewees is not directly related to building their leadership style.

Finally, the results of ANOVA suggest that there is a significant correlation between Education and Organisational Effectiveness (see Table 49 in appendix I). The data analysis suggests that the manager who completed Senior High School/Vocational School tends to reach high levels of Organisational Effectiveness. However, the results of Pearson's correlation suggest that there is no significant correlation between Education and Organisational Effectiveness (see Table 54 in appendix I). Thus, our results are inconsistent with the findings by Wiersema and Bantel (1992), who found that the educational level of managers is significantly correlated with Organisational Effectiveness. Similarly, Coleman (2007) found that the educational qualification of female managers has a positive correlation with Organisational Effectiveness. Hence, it is possible that

our findings are different from these studies because the educational levels of interviewees in small tyre firms in Thailand are not the key factor in driving Organisational Effectiveness. To elaborate, it is possible that the educational system of Thailand may be different from other countries which may lead to find different results. Hence, it would be useful for future research to investigate specifically the correlation between the Thai education system and Leadership styles in the Thai context.

## **2.5 Experience**

The results of ANOVA suggest that there is no significant correlation between experience and any of the four learning styles. This showed that interviewees' experience is not directly related to interviewees having different learning styles. However, the results of Pearson's correlation suggest that there is a weak correlation between experience and Theorist (see Table 52 in appendix I). Salaman and Butler (1994) proposed that managers' learning styles may be affected by work experience, which is consistent with the result found. This suggests that the manager interviewed who has had a lot of experience tends to be related to Theorist. It also implies that when it comes to problem solving, the more experienced manager would likely take time to consider the source of the problem systematically before deciding different ways to approach it. To elaborate, it is possible that the manager's experience slightly sustains a predominant Theorist learning style.

The results of ANOVA suggest a positive correlation between Experience and Transformational leadership (see Table 46 in appendix I). The interviewee who has had 6-16 years' experience (Medium) is likely to be associated with Transformational leadership. Managers' leadership could be further understood by considering how they develop their previous experiences and expertise to elucidate the ideas of followers and encourage creativity (Mumford et al., 2003). This implies that the manager interviewed with medium length of experience is more likely to be related to Transformational leadership. More specifically, the manager interviewed with medium length of experience may transfer knowledge to employees by practising aspects of Transformational leadership such as encouraging them to share ideas and experience with others. However, the results of Pearson's correlation suggest that there is no significant correlation between Experience and Leadership Styles (see Table 53 in appendix I). So, it may be concluded that experience is not directly correlated with the leadership styles of managers interviewed and it is not the contingent factor in driving interviewees to have different leadership styles.

Lastly, the results of ANOVA suggest that there is a significant correlation between Experience and Organisational Effectiveness (see Table 49 in appendix I). The interviewee with Medium experience is more likely to perform high levels of Organisational Effectiveness, implying that experience is helpful to interviewees. However, the results of Pearson's correlation indicate that there is no significant correlation between Experience and Organisational Effectiveness. Thus, our results are inconsistent with the findings of Coleman (2007), who

studied the relationship between demographics of managers and organisational effectiveness of the service and retail industries in the US; her results indicated that experience has a positive correlation with Organisational Effectiveness. However, in the Thai context, the experience of managers interviewed may not be the contingent factor which directly affects level of Organisational Effectiveness, because there may be other factors which are more associated with Organisational Effectiveness such as Number of Employees. As such, it is possible that the difference of geographic location, business types and economic conditions may contribute to the differences in findings.

## **2.6 Learning Styles**

The results of Pearson's correlation suggest that Activist has a strong negative correlation with Transformational Leadership, implying that the manager interviewed who has a high level of Activist in his learning style tends to have a low level of Transformational leadership (see Table 55 in appendix I). In contrast, Pragmatist and Reflector have a medium positive correlation with Transformational leadership, implying that the manager interviewed who has a high level of Pragmatist and Reflector would also have a high level of Transformational leadership qualities. Theorist on the other hand, has a weak positive correlation with Transformational leadership, implying that the manager interviewed with a high level of Theorist tends to have a high level of Transformational leadership. These results are supported by Bass (1985b; Bass and Avolio, 1989), who proposes that transformational forms of leadership are

particularly important in promoting organisational learning. Honey and Mumford (1992) emphasised that the nature of Pragmatist, Reflector and Theorist tend to encourage their employees to develop skills by practice, reflection and through logical considerations. Hence, it shows that these three learning styles are related to Transformational leadership in terms of creating and transferring knowledge to employees. It is thus possible that interviewees who display these three learning styles predominantly would also tend to have predominant Transformational leadership. Furthermore, it was found that there was no correlation between Transactional leadership and any of the four learning styles (see Table 56 in appendix I). It was also found that a weak positive correlation between Activist and Laissez-faire leadership suggests that the manager interviewed who has a high level of Activist tends also to have a high level of Laissez-faire, i.e. Activist managers tend to avoid making decisions, hesitate to take action, and are less likely to be supportive in terms of developing employees' skills.

The results of Pearson's correlation suggest that Activist has a strong negative correlation with Organisational Effectiveness (see Table 57 in appendix I), suggesting that the manager who has a high level of Activist would be unlikely to be supportive in producing a high level of Organisational Effectiveness. This could be explained by the work of Ames (2003) which argues that specific learning styles are related only to certain activities. Therefore, it is possible that interviewees who have a predominantly Activist learning style may not be supportive to this industry.

In addition, because of the nature of Activist, this kind of manager may make mistakes when solving problems because they may be too quick to decide rather than carefully analysing the situation. More specifically, in order to improve Organisational Effectiveness, they may need to listen to colleagues' ideas and suggestions, to take some time to consider the cause of problems before deciding how to solve them. Hence, this implies that Activist is not the contingent factor related to the level of Organisational Effectiveness.

It was found that there was a strong positive correlation between Pragmatist, Reflector and Organisational Effectiveness (see Table 57 in appendix I), implying that these learning styles are likely to produce a high level of Organisational Effectiveness. To elaborate, in the Thai context it is possible that Pragmatist and Reflector are interviewees who get along well with employees, as they are not extreme on both sides like Activist and Theorist who are likely to be self-centred and attached to theory. So, the components of being Pragmatist and Reflector may help manager to be good at transferring and encouraging learning in the workplace and ultimately increase the skills of the employees, leading to improved organisational effectiveness after all.

## **2.7 Leadership Styles**

The results of Pearson's correlation suggest that there is strong negative correlation between Transformational leadership and Activist, and a medium positive correlation between Transformational leadership and Pragmatist as well

as between Transformational leadership and Reflector (see Table 56 in appendix D). This suggests that interviewees who exhibit Transformational leadership are not likely to jump quickly to conclusions, but are likely to take time to consider the different circumstances before trying out a method to see if it solves the problem. To elaborate, in the Thai context seniority is moderately important, so it is possible that the interviewees who have predominant Transformational, Pragmatist and Reflector leadership styles may be good at transferring knowledge to employees in appropriate way. For example, the Transformational manager is likely to respect others and be willing to provide feedback to employees. So, this may help to reduce the gap between manager and employees and therefore create a learning environment in the workplace.

In addition, as suggested by House et al. (2004), Thailand is a Buddhist country, and Buddhism reflects the diversity of cultures. They also confirmed that in developing countries, especially in the countryside, the normal way of life is such that children look after their parents and provide material help in their old age. This shows that the manager with predominant Transformational leadership is likely to inspire, to motivate, and to expect high performance outcomes from others. It is also possible that Thai managers who are attached to Buddhism are influenced to become more generous; these managers interviewed may like to help others by providing feedback and also integrating new ways of learning by trying out new techniques or ideas in real situations in the workplace. This is relevant to major components of Pragmatist and Reflector learning styles. Results did not suggest any correlation between Transactional leadership and any

of the four learning styles (see Table 56 in appendix I). It was also found that there were a weak positive correlation between Laissez-faire leadership and Activist, suggesting that predominantly Laissez-faire managers may prefer to try out new things by themselves rather than discuss them with others. It was found that there was no correlation between Laissez-faire leadership and either Pragmatist, Reflector or Theorist.

There is a strong positive correlation between Transformational leadership and Organisational Effectiveness, implying that the manager who has a high level of Transformational leadership tends to be supportive to the firm. However, results did not suggest any correlation between Transactional leadership and Organisational Effectiveness. The findings are also consistent with those of Colbert et al. (2008), who found that Transformational leadership has a positive correlation with Organisational Effectiveness (see Table 58 in appendix I). Similarly, Howell et al. (2005) found that Transformational leadership was positively related to business performance while Transactional leadership was not significantly related to performance.

There is a weak negative correlation between Laissez-faire leadership and Organisational Effectiveness (see Table 58 in appendix I), implying that managers interviewed who exhibit predominantly Laissez-faire leadership tend not to be supportive to the firm. These findings are consistent with those of Corrigan et al. (2000), that Laissez-faire leadership is likely to result in damaging consequences for the working environment.

## **2.8 Discussion of the Major Findings of Multiple Regression Analysis**

After using the Multiple Regression Analysis to predict the Standardised Beta Coefficient Equation, it was found that Activist is the most influential predictor. It has a negative relationship with Organisational Effectiveness. It can be supposed that the manager with a predominantly Activist learning style tends to not be supportive to the organisation. Honey and Mumford (1992) proposed that Activist refers to people who prefer to act rather than listen, so it is possible that the Activist manager tends not to listen to colleagues' ideas or suggestions, leading to missing opportunities to develop and refine ideas when dealing with difficulties in the organisation.

On the other hand, it was found that Transformational leadership has a positive relationship with Organisational Effectiveness, implying that such managers interviewed are supportive to the organisation. There is substantial evidence suggesting that Transformational leadership helps to increase levels of individual performance (Avolio and Yamamario, 2002; Bass, 1985b; 1990). In addition, Transformational leadership is positively related to organisational performance (Colbert et al., 2008; Howell et al, 2005; Weichun at al., 2005). So, managers interviewed who are able to successfully create vision and a learning environment in the firm are also likely to increase their employees' skill levels which in turn would lead to improving Organisational Effectiveness.

Reflector and Pragmatist have a positive relationship with Organisational Effectiveness, implying that such managers interviewed tend to be supportive to business. These managers interviewed may need to consider transferring their knowledge and skills by explaining and demonstrating to employees, and they may also need to take time to collect data and information and then classify different ways to solve problems.

It was also found that Theorist has a negative correlation with Organisational Effectiveness, implying that managers interviewed in this category are not supportive to the firm. These managers interviewed may need to adjust their learning style slightly, as they may miss significant opportunities if they continue to concentrate exclusively on systems. Theorist managers tend to be attached to rules, but some business situations may require immediate and precise decision-making ability and these rules may not be practical under such pressing conditions. Similarly, it was found that Laissez-faire leadership has a negative correlation with Organisational Effectiveness, implying that the managers interviewed in this category are not supportive to the firm. Judge and Piccolo (2004) proposed that the Laissez-faire manager is likely to avoid making decisions, often being hesitant when finalising their decision. Also, it has been proven that Laissez-faire leadership is likely to have damaging consequences for the working environment (Corrigan et al., 2000), so these managers interviewed may need to adjust their leadership slightly, such that they show more confidence in making decisions promptly.

The variable Number of Employees has a positive correlation with Organisational Effectiveness. It could be suggested here, that the higher the number of employees, the better the level of organisational effectiveness the organisation is likely to achieve. It is also possible that the more successful the firm is, the better is its ability in hiring a high number of employees to work for the firm itself. Additionally, it is also possible that the firms with high performance would appear attractive and appealing to well-performed managers thus, facilitating the process of the firm acquiring and hiring such managers. Subsequently, these high performance managers would also more likely be able to hire more employees for the firm. These are only some of the possibilities for explaining this correlation.

Transactional Leadership also has a positive correlation with Organisational Effectiveness, so it can be supposed that the manager interviewed who has a high level of Transactional leadership is likely to be supportive to the firm. Kuhert (1994) proposed that the Transactional leadership manager is likely to provide appropriate rewards to employees, but to be less likely to support employees in terms of developing their skills. Such managers may need to consider playing a more active role in encouraging employees to develop skills, and provide rewards when needed. Nonetheless, the Beta Coefficient of Transactional leadership is approximately seven times less influential to Organisational Effectiveness than Transformational leadership. This finding is consistent with the research by Jens and Kathrin (2007); they found that Transformational

leadership has a stronger correlation with Organisational Effectiveness than Transactional leadership.

Like Number of Employees, Age has a positive correlation with Organisational Effectiveness. It can be supposed that the older the manager, the better he or she can perform. Similarly, Experience has a positive correlation with Organisational Effectiveness, implying that the more experienced the interviewees are, the better they perform. Likewise, Education has a positive correlation with Organisational Effectiveness, implying that the higher their level of education, the better the manager is likely to perform. Furthermore, compared to other variables, the statistical tests also indicated that gender is a largely irrelevant variable vis-à-vis organisational effectiveness. Nonetheless, this study did not explore the correlation between gender and organisational effectiveness specifically.

In addition, as found with the Pragmatist and Reflector learning styles, Transformational and Transactional Leadership are positively correlated with Organisational Effectiveness. In the Thai context, the manager is the key person because seniority is relatively important in Thai culture. So, it is possible that interviewees with predominant Pragmatist and Reflector learning styles are neither extreme thinkers or doers, nor more attached to theory or practice. At the same time, interviewees with Transformational and Transactional leadership qualities are respected and listen to others, and are also willing to assist employees with feedback and provide appropriate rewards to the employees. Again, this is reflected in Buddhism. Fundamentally, followers of this religion

are encouraged to progress from becoming more compassionate to becoming more generous, to detaching themselves from worldly desires, to becoming more focused mentally on spiritual wisdom and purity (House et al., 2004).

Hence, it may be possible that the religion of Thailand influences its culture, as emphasised by House and colleagues' suggestion that Thais are likely to be generous and normally look after their parents in their old age. So, this showed that the respondents who attained the highest rate of Self-Protective, which is closely linked to Charismatic/Value-based leadership, who are likely to inspire, to motivate, and to expect high performance outcomes, are relatively attached to the teaching of Buddhism which encourages people to be kind to others. Under the influence of Buddhism, interviewees are likely to be generous, that is willing to support, encourage, and motivate employees, cope well with the employees, and be supportive to the organisation.

Lastly, it was found that learning styles were mediated by leadership styles. However, it is important to note that both learning and leadership styles are important in shaping the key attributes of the manager in improving Organisational Effectiveness.

### **3. Discussion of Research Findings of Qualitative Approach**

This section discusses the findings of our qualitative approach with specific reference to Organisational Management, Leadership Roles, and Learning and Experience.

#### **3.1 Organisational Management**

The discussion of Organisational Management includes Operational and Human Resource Management.

##### **3.1.1 Operational Management**

Based on the responses obtained through the interviews, it was found that the majority of interviewees in the more effective firms identified the significance of technology and cost reduction as positive indicators of Organisational Effectiveness. For example, they applied new technology to further improve their service provision to their customers. More specifically, they chose to store important information such as their customers' profiles in a computer database and this greatly facilitated the process of searching for the service history of the customers concerned. On the other hand, the majority of interviewees in the less effective firms placed little emphasis on the importance of technology. Instead of seeing it as crucial in order to sustain their competitiveness, they emphasised that

investing in modern machinery would significantly increase costs. Moreover, it was also discovered that there was a significant lack of knowledge among these interviewees in terms of integrating and applying high technology in the running of their firms.

In terms of cost reduction, the majority of interviewees in the more effective firms strongly agreed that cost control is an important issue. They asserted, for example, that it is important to ensure that their payments are always on time in order to be classified by the tyre manufacturer as a special customer who is eligible for lower prices. As such, special privileges like these would assist greatly in cutting their costs. However, they also emphasised that continually improving the skills of employees is necessary and would create an advantage to their firm. Hence, they are willing to sustain the skills of their employees through on-the job training and off-the job training which are provided by the tyre manufacturers.

In short, the interviewees in the more effective firms appear to be more willing to invest in technology and try to establish partnerships with others to save costs, while those in less effective firms choose to adopt different strategies to reduce costs. Additionally, the former also realise that maintaining the skills of employees are significantly supportive to their firms, and this lead them to be aware of developing their firms by continually improving the quality of their service provisions to attain a higher level of cost-efficiency. This strongly suggests that interviewees in more effective firms are more willing to learn, and

this is supported by recent research findings whereby to be successful, organisation may consider to continually learn. It would appear that the organisations which continue to learn are competitive and at the leading edge of their fields of business, able to create their own futures instead of being carried along by events (Correll and Gregoire, 1998).

### 3.1.2 Human Resource Management

The majority of interviewees in the more effective firms are more aware of applying different tools related to human resource management to develop their firms than are the majority of interviewees in the less effective firms. For example, in terms of contribution and job description, the former interviewees apply different principles of human resource management to encourage their employees to be involved in discussion and make decisions on day-to-day responsibilities. The latter tend not to trust the ability of their employees, or to allow them to make decisions. Torrington et al. (2005) and Gail and Russell (2001) suggested that contribution and job description are among the most important tools to encourage employees to share knowledge within the organisation.

In terms of training and development, the majority of interviewees in the more effective firms emphasise that it is important to train and develop their employees' skills and knowledge on a regular basis, at least once a week. They also send their employees to participate in intensive workshop schemes provided

by the tyre manufacturers. In contrast, the majority of interviewees in the less effective firms are not likely to encourage their employees in any training programme because they are perceived to be adequately trained simply through regular practice of routine tasks at work.

In order to sustain organisational effectiveness, Vincent and Ross (2001) verified that managers must become active partners in establishing their businesses as learning organisations capable of preparing entry-level workers and upgrading current employees, and encouraging them to develop their skills by providing an appropriate learning environment through training within the organisation. This suggests that as the majority of interviewees in the more effective firms are more likely to encourage their employees through training, this would be likely to increase the level of productivity.

With regards to motivations and rewards, the majority of interviewees in the more effective firms emphasised that rewards are one of the most effective tools to motivate employees. For example, providing commission for their work is an important incentive. In contrast, the majority of interviewees in the less effective firms asserted that they do not use the commission system because it may result in the firm making only a small profit per unit, and hence, they do not see it worth motivating employees by using this method.

Michie and Oughton (2001) emphasise that if organisational members have a stake in the organisation in which they work, they will be better motivated and

committed, with positive outcomes in terms of productivity and organisational performance. Therefore, it could be suggested here, as the interviewees in the more effective firms are more likely to motivate their employees through commission systems, in the long run at least, this could be one of the possible tools to help make the most of employees' abilities to increase productivity.

Highlighting the importance of collaboration, the majority of interviewees in the more effective firms emphasised that good teamwork could lead to improved quality of work. In contrast, the other interviewees did not encourage their employees to foster close ties among themselves as this might make it difficult to manage them as a whole. However, Tichy et al. (1992) emphasise that collaboration is needed to develop employees' knowledge and learning. As such, it could be observed that the majority of interviewees in the more effective firms are more likely to encourage collaboration among their employees by working as a team. This could be beneficial, helping employees to get more detailed feedback from one another, which in turn could prove useful when seeking ways to identify and tackle problems.

In terms of providing benefits, the majority of interviewees in the more effective firms recognised employees as the most valuable resource of the firm, and therefore tend to treat them as part of their own family. More specifically, they offer a range of benefits as incentives to motivate their employees further, in the form of accommodation, meals, transport and uniforms. Similarly, the majority of interviewees in the less effective firms agree that providing benefits is one of

the most important factors to motivate their employees, offering benefits in the form of health insurance, lunch and accommodation. Based on the interviews, the majority of interviewees appear to be aware of the importance of providing benefits to their employees, and this could be an important tool in motivating employees to work to the best of their ability. This is also consistent with the idea suggested by Hofstede (2001, p. 29) that uncertainty avoidance is related to “the level of stress in a society in face of unknown future”. Everyone perceives uncertainty but the ways people cope with it are different. In organisations, uncertainty is often related to the environment and common coping mechanisms include technology, rules, and rituals (Hofstede, 1980). So, this showed that applying the appropriate HRM practices may help to maintain employee satisfaction, related to reward strategies.

For instance, Shore and Tetrick (1994) recommended that the key outcomes for employees are fair pay, good working conditions and job security. This can be confirmed by the study of Guest and Conway (1997), who found that there is a relationship between psychological contract and HRM practices. A 1000-employee sample of the U.K. working population, adopting an employee perspective, illustrated that the state of the psychological contract was explained by greater reported use of progressive HRM practices, by the presence of an organisational climate that can be characterised as one of high involvement and partnership, and by future expectations of employment security. There was a positive relationship between psychological contract and higher job satisfaction, higher organisational commitment, higher reported motivation and a positive

evaluation of employment relations as well as lower intention to quit. So, it is possible that the rewards system applied to enhance employee satisfaction may help employees to have a high level confidence in job security. Providing health insurance, lunch, and accommodation may help to assure employees that while they work for the organisation, they do not need to be concerned about their physical needs. Where employees perform well, they might be rewarded by promotion or increased wages; this may help encourage them to practise and learn to increase their individual performance and may ultimately increase the overall organisational effectiveness.

To further improve the efficiency of the firm, Afiouni (2007) highlighted the importance of encouraging a learning environment throughout the entire organisation. Similarly, Vincent and Ross (2001) asserted that HRM is one of the most essential aspects in sustaining organisational learning. This could be achieved by applying an appropriate strategy for human resource management. The purpose of this is to encourage employees to share knowledge, assist group interaction and facilitate the organisation to store knowledge of the system, routines, processes and cultures which in turn could further drive organisational effectiveness. As highlighted in the previous discussion, it could be observed that interviewees in the more effective firms have applied different human resource management strategies to encourage their employees. Arguably, this has helped them to further expand and develop their employees' knowledge and skills, and subsequently contributed to further improvements in Organisational Effectiveness overall.

### **3.2 Leadership Role**

The majority of interviewees in the more effective firms tend to spend time discussing and listening to their employees' problems, and provide prompt, useful suggestions. In contrast, the other interviewees tend to presume that their employees are experienced workers, so they do not see it as necessary to spend time in further discussion. It could be suggested that interviewees should spend more time in discussion with employees to see if there are any problems, and to promptly assist them before the problems become more difficult to solve.

In terms of anticipation, the majority of the interviewees in the more effective firms emphasise that it is necessary to pay attention to market trends, particularly because the tyre market is highly competitive. On the other hand, the majority of other interviewees were not aware of the usefulness of updating themselves on the current state of the market, which suggests they might have missed some important opportunities to boost their sales. Therefore, it could be argued that interviewees should always update their knowledge of the current market to avoid losing good business opportunities.

In terms of task allocation, the majority of the interviewees in the more effective firms argued that it is necessary to allocate tasks to specific employees because they emphasised that different employees have different skills. In contrast, the majority of the other managers interviewed emphasised every employee to be capable of performing anything they are assigned to, so they did not assign a

specific task to a specific employee. It could be argued that interviewees should realise that different employees may perform better on specific tasks, so it may be important to select the right person for the right job based on their qualifications.

Nonetheless, the majority of the interviewees in the more effective firms also recognised that power delegation is important to help build confidence in their employees. For example, this could be achieved by giving them opportunities to deal with different problems occurring in the workplace. For instance, one of the interviewees said that “I always give advice to my employees to accomplish their tasks”. This showed that this manager interviewed not only delegates power but also provides feedback to the employees which would be helpful to them in completing their tasks. Also, this implied that this kind of manager interviewed tends to be closely connected to the Transformational leadership style. On the other hand, the majority of other interviewees avoided delegating power because they emphasise that employees should only perform the specific tasks that they have been assigned to. Thus, it could be suggested that interviewees should delegate power so that employees will be able to further develop their skills and further develop their confidence.

Khan et al. (1964) found that the differences in organisational role expectations and role pressures recognised by different managers may lead them to utilise different leadership behaviours within the same contexts. To a large extent, their findings are reflected in this study. For example, the results suggest that different

interviewees in both more and less effective firms prioritise leadership roles differently, and this may result in different levels of organisational effectiveness. Senge (1990) proposed that 'without the appropriate leadership the organisational learning could not happen'. Hence, interviewees may need to consider applying appropriate leadership roles such as facilitating training and coaching to sustain a conducive learning environment in the organisation and, in turn, to further enhance productivity.

### **3.3 Learning and Experience**

In the more effective firms, the majority of the interviewees are comparatively well educated; several of them possess technical experience from previous work and some have acquired their skills by observing their colleagues. On the other hand, some interviewees in the less effective firms have a relatively low level of education, and some are moderately well educated, but nearly all have a lot of work experience. Most of them started their careers at an early age, in businesses related to this field. For a majority of these interviewees, first-hand experience is the main source that they use to improve their skills.

Thus, it could be deduced that education may be one of the key factors to help managers interviewed to learn how to manage their firms more effectively. Similarly, Variyam and Kraybill (1993) argue that management education leads to greater use of planning and technology, but they could not quantify whether this in turn has any actual impact on a firm's performance. On the other hand,

Kristy et al. (2007) found that learning from experience is correlated with effective learning and leadership for the manager. As such, both levels of education and amount of experience are important factors assisting the manager in finding creative new ways of improving productivity.

In this study, it was clearly observed that interviewees in the more effective firms are comparatively well educated and they learnt some of their skills by observing, practising, and memorising information from their colleagues; they directly applied this knowledge and skills to deal with problems in the workplace. For example, one manager interviewed said that “I always test new ideas and techniques to see if they work in the real situation”. This is also compatible with one of the constituents of Pragmatist, that they tend to try out their ideas, theories and techniques to see if they work in practice. This also implied that this type of manager interviewed is likely to create new ideas which would be helpful for their firms in discovering better ways of working. This is also consistent with the concept of Hofstede (2001, p. 29), who suggested that individualism versus collectivism is about the “integration of individuals into primary groups”. It is manifested in the ways people from different societies live together. It reflects people’s expectations to take care of themselves or receive care from their peers (Hofstede, 1980). Therefore, it is possible that the employees may perceive that this kind of manager is taking care of them by being energetic in transferring knowledge, techniques and ideas on how to solve problems, and this may lead employees to practise and enhance their individual performance since they recognise that they are important to the organisation.

In contrast, interviewees in the less effective firms are moderately poorly educated; they prefer to learn through first-hand experience. Therefore, it may take longer for the different stages of learning to develop because they have to spend relatively more time to learn themselves through trial and error from the beginning. However, if they instead chose to observe and listen to their experienced colleagues, interviewees in these less effective firms would be more likely to learn more advanced skills, in a relatively time-efficient manner and at a lesser cost to the firm. In addition, the interviewees in the less effective firms are also likely to be meticulous in finding the way to solve problems. For example, one manager interviewed said that “normally, when problems occur in my workplace, I carefully select the best way to solve them by looking at the sources of problems”. This is consistent with one of the elements of Theorist, that this type of person is likely to solve problems in a rational and logical manner. This also implied that interviewees in the less effective firms may require much longer to find solutions to problems. So, this may not be appropriate for certain kinds of problems that require prompt action from the manager.

### **3.4 Discussion of the Major Findings of the Independent Sample t-test**

In this section, findings from the independent sample t-test will be discussed. Statistical testing was used to analyse the relationship between Learning and Experience, Organisational Management, Leadership Role and the Organisational Effectiveness.

#### **3.4.1 Learning and Experience**

The results show that Number of Employees is significantly related to Organisational Effectiveness. In contrast, Gender, Age, Experience and Education did not have any correlation with Organisational Effectiveness. Senge (1992) argued that the main purposes of organisational learning are to develop new knowledge in the organisation, and to create more efficient and effective management of the resulting organisational assets. As the data suggest that Number of Employees is significant to Organisational Effectiveness, this may imply that the greater the number of employees the more likely is the firm to develop ideas which could lead to improvement in Organisational Effectiveness. Nevertheless, apart from attributing organisational effectiveness to the employees, it could also be added that the firm is more successful due to the performance of the manager, which could subsequently lead to further development in the capacity of the firm to recruit more employees. These are only a few of the possibilities that could help explain this relationship.

### 3.4.2 Organisational Management

The results show that contribution and job description, training and development, and collaboration are correlated with Organisational Effectiveness. However, it was found that there was no correlation between either motivation or benefits and Organisational Effectiveness. As such, our findings are consistent with several studies which have found that human resource management practice is useful to support organisational learning and improve Organisational Effectiveness (Gail and Russell, 2001; Kersley et al., 2005; Michie and Sheehan-Quinn, 2001; Szarka et al., 2004; Torrington et al., 2005; Vincent and Ross, 2001) In addition, Guest et al. (2003) proposed that since organisational learning takes place at different levels of organisation, which in turn helps to improve organisational performance, providing appropriate human resource policies and practices is one of the most important challenges for organisations in reaching out to their employees. This suggests that to encourage learning in the organisation and improve the level of productivity, interviewees may need to consider applying a range of human resource management practices. The main practices to consider may include contribution and job description, training and development, and collaboration. However, some interviewees in both the more and less effective firms emphasised that benefits are also necessary to motivate their employees.

### 3.4.3 Leadership Role

The results show that discussion, power delegation and task allocation have a significant relationship with Organisational Effectiveness. However, the results did not suggest any correlation between anticipation and Organisational Effectiveness. The results imply that interviewees may need to consider spending time in discussion with employees; this could lead to creating a good relationship between them. In addition, interviewees may need to consider delegating power to employees by supporting and providing them with opportunities to play a role in decision making when it comes to dealing with problems. Interviewees may also need to consider assigning the right tasks to the right employees in order to ensure the quality of the work. In support of this, Pemberton and Stonehouse (2000) asserted that managers play an important role in improving and accelerating the process of building and applying new knowledge. Also, Smith and Lyles (2005) proposed that knowledge comes from both formal teaching and personal experience. Hence, to sustain the learning environment in the organisation, interviewees may need to apply effective roles such as discussion, power delegation and task allocation in order to encourage and transfer knowledge to their employees.

## **4. Conclusion**

The qualitative data were gathered from the extreme low and high levels of Organisational Effectiveness score of each firm. So, twenty firms were

interviewed, ten from less effective firms and the rest from more effective firms, based on the mean score of Organisational Effectiveness.

Based on the quantitative results, it was found that interviewees with Pragmatist and Reflector, and Transformational and Transactional leadership styles are positively associated with Organisational Effectiveness. It was discovered from the results of the qualitative data that a manager interviewed in a more effective firm said that “I always test new ideas and techniques to see if they work in the real situation”. This is also compatible with one of the constituents of Pragmatist that they tend to try out their ideas, theories and techniques to see if they work in practice. This also implied that this type of manager is likely to create new ideas which would be helpful to their firms in discovering better ways of working.

In addition, one of the interviewees in a more effective firm said that “I always give advice to my employees to accomplish their tasks”. This showed that this manager interviewed not only delegates power but also provides feedback to his employees which would enable them to complete their tasks. Also, this implied that this kind of manager interviewed tends to be closely connected to the Transformational leadership style. Therefore, it can be seen that to be effective, these interviewees may need to develop their learning styles by applying the Pragmatist and Reflector learning styles, such as gathering good ideas from colleagues and trying them out to see if they work in the workplace.

At the same time, these interviewees may need to apply Transformational leadership styles such as empowering and encouraging employees to work with close assistance plus providing feedback when they ask for it. For example, the manager may transfer knowledge and encourage employees to practise and work as a team by providing a role-play such as counting the time taken for changing the tyres on a car. A manager may divide employees into two teams, to compete against each other. The team that can change the tyres of a car in the shortest time period would be rewarded, such as being treated to a dinner.

Consequently, this may help to increase the capabilities and skills of employees and also encourage them to work as a team and share ideas with each other, and ultimately this would help to increase the overall organisational effectiveness.

The next chapter offers a conclusion and recommendations.

# **CHAPTER 8 CONCLUSION AND RECOMMENDATIONS**

## **1. Introduction**

This chapter discusses the originality, the contribution they make to the subject, the limitations and implications of the research, and finally makes some recommendations for future research.

## **2. Originality and Contribution of Research Findings**

Organisational learning is described as a process of acquisition of information and its interpretation, resulting in behavioural and cognitive changes which influence organisational effectiveness (Dimovski, 1994; Senge, 2006). It takes place at different levels in the organisation and requires organisational members to contribute in terms of sharing thought and knowledge (David, 2005). Pemberton and Stonehouse (2000) argue that an integral feature of organisational learning is that it applies its knowledge resources to improving performance; the manager is the key person helping employees to create learning within the organisation. In order to train employees effectively, it is clear that managers need to understand their own learning styles (Honey and Mumford, 1992; Stevens and Frazer, 2005). Moreover, without the appropriate leadership,

organisational learning could not take place (Senge, 1990). Hence, it could be asserted that the manager is the important driver who helps organisational members to contribute in sharing knowledge, and that this could further improve organisational effectiveness. In this study, I attempted to investigate the predominant learning and leadership styles of interviewees, which serve to sustain organisational effectiveness.

In addition, Gherardi et al. (1998), emphasising that each organisation has its own characteristic, proposed that learning could take place in the day-to-day activities and throughout the practical experience of the employees. They also strongly emphasised the need for future research to study different areas and provide further examples of different patterns of activity associated with learning in the organisation other than the one investigated in their research. Similarly, Casey (2005) suggested that contemporary studies have already extended their scope to other levels of learning, which include groups, activities, networks and organisations. Nevertheless, the theory and research at these levels of learning and the links between them are currently in the early stages of exploration. It is important to note that the relationships between these lines of research need to be reinforced to build on the knowledge being produced.

Furthermore, Pelham and Lieb (2004) studied the perceptions of managers in small and medium-sized industrial manufacturing firms, and suggested that future research should include retail and service firms to further extend the usefulness of such studies by improving the generalisability of the data obtained.

Therefore, one of the main aims of this study is to provide further recommendations based on management practices in the light of organisational learning among small tyre firms in developing countries, drawing from research in the Thai context.

Kidd and Kanda (2000) asserted that where managers' backgrounds are diverse, this suggests they may have different ways of managing and transferring knowledge within the organisation. This would also lead to creating different levels of productivity. In this study, the researcher therefore investigated the relationship between demographics of interviewees and their learning styles. ANOVA results show that a female manager is more likely to be related to the Activist learning style than is a male manager. In contrast, male managers are more likely to be related to Reflector and Theorist learning styles. Interviewees aged 54 and above are more likely to be related to Theorist than are the other age groups. Nonetheless, the results did not suggest any correlation between age and either Activist, Pragmatist, or Reflector. Also, interviewees who graduated from Senior High School/Vocational School were more likely to be related to Activist. However, the results did not suggest any correlation between levels of education and either Pragmatist, Reflector or Theorist.

Lastly, the results did not suggest any correlation between experience and any of the four learning styles. However, the results of Pearson's correlation demonstrate that Age has a weak positive correlation with Theorist, although I did not find any correlation between Age and either Activist, Pragmatist or

Reflector. Furthermore, there is no correlation between Education and any of the four learning styles. Lastly, there is a weak correlation between Experience and Theorist but I did not find any correlation between Experience and either Activist, Pragmatist or Reflector. Therefore, it can be supposed that demographics of interviewees are not directly correlated with their learning styles.

Nonetheless, Kristy et al. (2007) suggested that their own future research should expand the scope of analysis to include the demographics of interviewees such as gender, age, experience in management, level of education as well as personality factors, to explain additional variance in Transformational leadership. In this study, the results of ANOVA suggest that there is no correlation between gender, age, and any of the three leadership styles. This suggests that different gender and age would not impact interviewees' leadership styles. However, it was found that interviewees who completed Senior High School/Vocational School are significantly related with Transformational leadership. On the other hand, the results did not suggest any correlation between Education and either Transactional or Laissez-faire styles of leadership. The results suggested that interviewees with 6-16 years' experience are likely to be related to Transformational leadership. However, the results of Pearson's correlation suggest that there is no correlation between Age, Education, Experience and any of the three leadership styles. Thus, it can be supposed that Age, Education and Experience do not directly have an impact on leadership styles.

In addition, Gilbert et al. (2008) applied learning styles to develop further understanding on work preference. They recommended that future researchers should attempt to seek and identify other unobtrusive performance measures to relate with the learning styles of respondents. In this particular study, the learning styles of the interviewees were tested with the organisational effectiveness using subjective measures which were obtained from the questionnaires focusing on the interviewees' competences. Furthermore, the relationship between learning styles, leadership styles and Organisational Effectiveness remains largely unexplored (Jackson et al., 2003; Kristy et al., 2007). Also, several researchers suggested that leadership and performance are two important and interrelated variables contributing to Organisational Effectiveness and thus there is a critical need to examine this relationship (Hadikin and O'Driscoll, 2000; Tepper, 2000). In this study, the researcher therefore expanded a scope of this research to examine the relationship between learning styles, leadership styles and Organisational Effectiveness, and it was found that the predominant learning styles of interviewees who are supportive to their firms are Pragmatist and Reflector, whilst the predominant leadership styles are Transformational and Transactional. It was also found that learning styles were mediated by leadership styles in sustaining Organisational Effectiveness.

Senge (1992) asserted that to achieve superior business performance, an organisation is required to encourage learning at different levels, and may need to discover how to tap into people's commitment and capacity to learn. Hence, to have a deeper understanding of what the managers have contributed to encourage

learning within their firms to create different levels of organisational effectiveness, this thesis was focused on organisational management, leadership roles and learning and experience. It was found that in terms of organisational management, to manage firms more effectively it appears that technology, contribution and job description, training and development, and collaboration should be considered. In terms of leadership roles, interviewees should consider spending time in discussion with employees, delegating power, and allocating appropriate tasks to the right person. Lastly, in terms of learning and experience, it was found that gender, age, experience and education are not significantly related to Organisational Effectiveness.

### **3. Implications of Research Findings**

Honey and Mumford (1992) demonstrated that learning styles give managers more insight in terms of assisting them to generate a learning environment for their employees and developing their learning experiences effectively to transfer knowledge to their employees. In this study, it was also found that learning styles have a positive correlation with Organisational Effectiveness. Therefore, it would be helpful for managers to encourage learning in the organisation by applying the effective learning styles, Pragmatist and Reflector, to transfer knowledge and skills to the employees. Furthermore, managers may need to encourage employees to share ideas and then bring forth those ideas to try out in practice. At the same time, managers may need to take some time to consider and gather the information. Also important, the manager should tackle problems by

analysing and observing them from different perspectives and then refine the alternative ways of approaching problems.

Pham and Swierczek (2006) found that managers who recognise knowledge as a critical resource have a positive attitude towards organisational learning. However, Senge (1990) said that without the appropriate leadership, organisational learning could not take place. In this study, it was found that leadership styles have a positive correlation with Organisational Effectiveness, so it would be helpful for managers to apply the effective leadership styles, Transformational and Transactional, to encourage learning in the organisation by developing employees' skills through creating new ways of solving problems. For example, managers may support their employees by boosting their confidence when they set out to accomplish their assigned tasks, and giving them feedback on how best to improve their performance. Also, it may be useful for managers to create vision among employees and challenge them to think critically about their work. For further encouragement, managers may need to show appreciation and support for employees when they have successfully completed the assigned tasks, for instance suggesting that they are pleased and satisfied to have such valuable employees in the organisation. Studies have also shown it is necessary to provide appropriate rewards to employees when they accomplish assigned tasks.

More importantly, Buchanan and Huczynski (2004) defined the organisation as a social arrangement for achieving controlled performance in pursuit of collective

goals. Within this arrangement, in order to create organisational learning, Senge (1990) proposed that the leader's role is to develop a shared vision, provide the resources needed, to delegate authority, and celebrate learning successes. Therefore, the manager may find it useful to apply this expertise by contributing to the firm through organisational management, leadership role and learning and experience. Managers may need to consider building up their employees' repertoire of skills and knowledge on a continual basis, and also developing the firm by applying new technology to enhance overall organisational effectiveness. At the same time, managers should also consider human resource management practices to motivate their employees to further improve their skills.

Key factors for managers in sustaining their efforts include discussion, anticipation, power delegation and task allocation. Talking to employees enables managers to deal with potential problems at an early stage. Managers should also keep themselves updated with the market trends in order to be prepared and keep the firm competitive. Managers may also need to delegate power to employees to encourage confidence in decision making and help them improve their skills. In addition, managers should assign appropriate tasks to the right employees, as this may help increase productivity levels and also reduce the likelihood of mistakes.

To be effective, managers need to be active in developing their learning and leadership styles by attending relevant training programmes, as provided by both academic and private institutions. However, training programmes targeted at developing managers' learning and leadership styles may well involve high

costs, particularly those programmes that fit the needs of developing specific skills. Thus, in order to save costs, managers may seek training programmes which are sponsored by the government or private-sector partnerships, including the tyre manufacturers. In addition to minimising costs, this may help managers to increase their abilities in transferring their knowledge to employees through the provision of specific and relevant training programmes.

In conclusion, it is necessary for managers to apply effective learning and leadership styles to encourage learning in the organisation. They may need to consider improving Organisational Effectiveness through organisational management, leadership roles, and learning and experience. Different learning and leadership styles may create different levels of Organisational Effectiveness, and only certain learning and leadership styles may be suitable in some situations. Therefore, managers may need to consider applying appropriate learning and leadership styles to different situations in order to sustain learning in the organisation and to improve Organisational Effectiveness as a result.

#### **4. Limitations and Recommendations for Future Research**

While this study specifically investigated small tyre firms in the Thai context, future studies could be extended to include different geographical regions at both local and international levels in order to develop broader views (Hetland and Sandal, 2003). According to Hofstede (1993) “there are no such things as

universal management theories”. This implied that perception which may be considered as “good” in some cultures, may be considered “bad” in others. House et al. (2004) also proposed that Thailand’s Buddhist religion plays a vital role in shaping the culture of Thailand. This showed that differences between cultures may lead to different findings. Hence, future research may need to consider extending the study to investigate different contexts with different cultures and religions. This could also involve classifying the different approaches with a more diverse sample on perhaps a larger scale, different business sectors, and business strategies. For example, researchers may specifically investigate the approaches to learning and leadership styles of managers in companies such as Ryanair and Wal-mart (both companies are profit-focused retail companies) and compare these to British Airways or Marks and Spencer (both companies are quality-focused retail companies). This may help to acquire a deeper understanding of how each manager contributes to his or her organisation, allowing the researcher to identify particular techniques for transferring knowledge to and encouraging employees.

This study concentrated on the relationship between managers’ learning styles and leadership styles, and Organisational Effectiveness; this still leaves room to extend the scope of research to account for other potential variables which may be correlated with managers’ characteristics and Organisational Effectiveness, such as personalities of the managers or organisational culture (see, for example, Aragon-Correa et al., 2007; Chang and Lee, 2007; Furnham et al., 1999; Ghobadian and O'Regan, 2006, House et al., 2004).

Moreover, this study focuses on a cross-sectional sample of one specific business type, which limits the degree to which the researcher can make causal references regarding hypothesised relationships. Furthermore, the dependence on the self-report questionnaire suggests that the magnitude of relationships between variables may require further research. To a large extent, this is to facilitate the process of cross-checking the responses given and improve its validity. Additionally, for this thesis, only the respondents' perceptions of learning styles, leadership styles and Organisational Effectiveness were measured.

As such, it is important to recognise the limitations that tend to be associated with cross-sectional studies including those that are of a self-reporting nature like this one. It is possible that relationships between the different variables are influenced by factors other than those investigated. These limitations underline the need to conduct multi-organisational studies that take into account different learning and leadership styles and Organisational Effectiveness and in addition, control for a variety of demographics of the respondents.

Furthermore, it is also recommended for future studies to consider other groups relevant to the firms apart from the managers. In this study, the managers were specifically approached to complete the questionnaires based on their perceptions. However, their accounts may not be adequately comprehensive in understanding the contribution of learning styles and leadership styles to organisational effectiveness. It is thus, highly recommended to take into consideration the views of other potentially useful respondents from different

positions for cross-checking purposes. More specifically, it may prove useful for future studies on organisational effectiveness to include the views from a wider range of respondents other than the managers themselves such as their employees or their clients.

Although this study is first of its kind in the Thai context, a replication of this research in the future may be beneficial to help gain a better understanding of this industry and its prospects in the economy. The researcher may consider conducting a longitudinal study to assess and confirm the relationships between independent and dependent variables that have been identified through the findings of this study.

However, it is important to note that there may be certain challenges to gaining access to vital information that could contribute greatly to the research study. For example in this study the respondents were not willing to provide detailed financial data of their firms because of the highly competitive nature of their businesses. As such an alternative method was adopted to gain a general idea of the firms' different levels of organisational effectiveness, whereby the managers were asked to evaluate the financial performance of their firms instead. Wall et al. (2004) proposed that although it is clear that subjective and objective measures of financial performance have much in common, one cannot assume that either is error-free. Therefore, to make this study more generalisable, it would be helpful for future research to look at objective measures such as return

on assets, productivity or profit (see, for example, Davis and Daley, 2008; Ellinger et al., 2002; Michie and Sheehan, 2003).

## **5. Conclusion**

This study investigated the relationship between learning styles, leadership styles and Organisational Effectiveness. It aimed to provide greater understanding of what attributes of learning and leadership styles are useful for managers, and to consider which of these learning styles and leadership styles contribute towards Organisational Effectiveness. Although the findings of this thesis represent the implications of the relationship between managers' learning styles, leadership styles and organisational effectiveness, there may be other variables which influence the translation of managers' learning styles and leadership styles into organisational effectiveness (i.e. cultures) as suggested by Hofstede (1993, p. 92); he emphasised that "a culture cannot be satisfactorily described in terms of the characteristics of a typical individual. There is a tendency in the U.S. management literature to overlook the forest for the trees and to ascribe cultural differences to interactions among individuals". Hence, regarding the cultural differences, it may be cautioned to broaden the implications of this thesis into different regional contexts. Quantitative and qualitative approaches were used to analyse the data. The results suggested that the number of employees has a positive correlation with learning styles, leadership styles and Organisational Effectiveness. In contrast, respondents' demographics have little or no correlation with these factors. The interviews did suggest that learning and

leadership styles have a positive correlation with Organisational Effectiveness. In addition, the results suggested that the effective learning styles are Pragmatist and Reflector, and the effective leadership styles, Transformational and Transactional. This research has thus emphasised how managers might contribute to creating a conducive learning environment, and in turn improve organisational effectiveness.

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## APPENDICES

### Appendix A: Pilot Study Reliability Analysis Scale (Cronbach's coefficient alpha)

#### Learning Style

**Appendix A: Table 1. Activist Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 7        | 17.033                     | 4.861                          | 0.784                            | 0.725                 |
| 8        | 17.133                     | 5.016                          | 0.756                            | 0.736                 |
| 9        | 17.100                     | 5.266                          | 0.599                            | 0.785                 |
| 10       | 17.300                     | 6.010                          | 0.439                            | 0.828                 |
| 21       | 17.167                     | 6.006                          | 0.482                            | 0.816                 |

**Appendix A: Table 2. Reliability Coefficients N of Cases = 30, N of Items = 5**

|                              | Activist |
|------------------------------|----------|
| Cronbach's coefficient alpha | 0.817    |

**Appendix A: Table 3. Pragmatist Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 12       | 17.567                     | 15.564                         | 0.737                            | 0.754                 |
| 13       | 18.000                     | 17.379                         | 0.497                            | 0.819                 |
| 14       | 17.533                     | 16.326                         | 0.622                            | 0.785                 |
| 15       | 17.967                     | 15.895                         | 0.552                            | 0.807                 |
| 22       | 17.733                     | 14.685                         | 0.688                            | 0.764                 |

**Appendix A: Table 4. Reliability Coefficients N of Cases = 30, N of Items = 5**

|                              | Pragmatist |
|------------------------------|------------|
| Cronbach's coefficient alpha | 0.822      |

**Appendix A: Table 5. Reflector Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 17       | 12.767                     | 15.358                         | 0.649                            | 0.771                 |
| 18       | 13.133                     | 13.499                         | 0.673                            | 0.759                 |
| 19       | 13.100                     | 16.576                         | 0.376                            | 0.846                 |
| 20       | 13.000                     | 13.793                         | 0.649                            | 0.767                 |
| 23       | 12.933                     | 14.340                         | 0.726                            | 0.747                 |

**Appendix A: Table 6. Reliability Coefficients N of Cases = 30, N of Items = 5**

|                              | Reflector |
|------------------------------|-----------|
| Cronbach's coefficient alpha | 0.816     |

**Appendix A: Table 7. Theorist Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 6        | 12.867                     | 10.051                         | 0.628                            | 0.767                 |
| 11       | 12.767                     | 10.116                         | 0.768                            | 0.731                 |
| 16       | 12.833                     | 10.213                         | 0.686                            | 0.751                 |
| 24       | 13.133                     | 10.740                         | 0.490                            | 0.810                 |
| 25       | 12.800                     | 10.717                         | 0.478                            | 0.815                 |

**Appendix A: Table 8. Reliability Coefficients N of Cases = 30, N of Items = 5**

|                              | Theorist |
|------------------------------|----------|
| Cronbach's coefficient alpha | 0.812    |

## Leadership Style

**Appendix A: Table 9. Transformational Leadership Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 26       | 27.833                     | 18.282                         | 0.653                            | 0.800                 |
| 27       | 27.567                     | 19.426                         | 0.540                            | 0.812                 |
| 28       | 27.733                     | 19.926                         | 0.556                            | 0.810                 |
| 29       | 27.633                     | 18.447                         | 0.669                            | 0.799                 |
| 33       | 27.267                     | 21.582                         | 0.337                            | 0.827                 |
| 34       | 27.533                     | 21.154                         | 0.474                            | 0.818                 |
| 35       | 27.200                     | 20.097                         | 0.480                            | 0.817                 |
| 36       | 27.333                     | 20.920                         | 0.509                            | 0.815                 |
| 40       | 27.167                     | 20.144                         | 0.581                            | 0.809                 |
| 41       | 27.267                     | 20.547                         | 0.434                            | 0.821                 |
| 42       | 27.400                     | 21.835                         | 0.249                            | 0.834                 |
| 43       | 26.967                     | 22.240                         | 0.340                            | 0.8263                |

**Appendix A: Table 10. Reliability Coefficients N of Cases = 30, N of Items = 12**

|                              |                             |
|------------------------------|-----------------------------|
|                              | Transformational leadership |
| Cronbach's coefficient alpha | 0.829                       |

**Appendix A: Table 11. Transactional Leadership Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 30       | 14.733                     | 4.616                          | 0.712                            | 0.796                 |
| 31       | 14.967                     | 5.413                          | 0.545                            | 0.830                 |
| 37       | 14.733                     | 4.754                          | 0.650                            | 0.809                 |
| 38       | 14.800                     | 4.786                          | 0.636                            | 0.812                 |
| 44       | 14.833                     | 4.282                          | 0.739                            | 0.790                 |
| 45       | 14.767                     | 5.702                          | 0.445                            | 0.845                 |

**Appendix A: Table 12. Reliability Coefficients N of Cases = 30, N of Items = 6**

|                              |                          |
|------------------------------|--------------------------|
|                              | Transactional leadership |
| Cronbach's coefficient alpha | 0.842                    |

**Appendix A: Table 13. Laissez-faire Leadership Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 32       | 5.433                      | 1.082                          | 0.756                            | 0.737                 |
| 39       | 5.600                      | 0.869                          | 0.712                            | 0.735                 |
| 46       | 5.767                      | 0.806                          | 0.652                            | 0.822                 |

**Appendix A: Table 14. Reliability Coefficients N of Cases = 30, N of Items = 3**

|                              | Laissez-faire Leadership |
|------------------------------|--------------------------|
| Cronbach's coefficient alpha | 0.828                    |

**Appendix A: Table 15. Table for determining sample size from a given population**

| N  | S  | N   | S   | N   | S   | N    | S   | N      | S   |
|----|----|-----|-----|-----|-----|------|-----|--------|-----|
| 10 | 10 | 100 | 80  | 280 | 162 | 800  | 260 | 2800   | 338 |
| 15 | 14 | 110 | 86  | 290 | 165 | 850  | 265 | 3000   | 341 |
| 20 | 19 | 120 | 92  | 300 | 169 | 900  | 269 | 3500   | 246 |
| 25 | 24 | 130 | 97  | 320 | 175 | 950  | 274 | 4000   | 351 |
| 30 | 28 | 140 | 103 | 340 | 181 | 1000 | 278 | 4500   | 351 |
| 35 | 32 | 150 | 108 | 360 | 186 | 1100 | 285 | 5000   | 357 |
| 40 | 36 | 160 | 113 | 380 | 181 | 1200 | 291 | 6000   | 361 |
| 45 | 40 | 180 | 118 | 400 | 196 | 1300 | 297 | 7000   | 364 |
| 50 | 44 | 190 | 123 | 420 | 201 | 1400 | 302 | 8000   | 367 |
| 55 | 48 | 200 | 127 | 440 | 205 | 1500 | 306 | 9000   | 368 |
| 60 | 52 | 210 | 132 | 460 | 210 | 1600 | 310 | 10000  | 373 |
| 65 | 56 | 220 | 136 | 480 | 214 | 1700 | 313 | 15000  | 375 |
| 70 | 59 | 230 | 140 | 500 | 217 | 1800 | 317 | 20000  | 377 |
| 75 | 63 | 240 | 144 | 550 | 225 | 1900 | 320 | 30000  | 379 |
| 80 | 66 | 250 | 148 | 600 | 234 | 2000 | 322 | 40000  | 380 |
| 85 | 70 | 260 | 152 | 650 | 242 | 2200 | 327 | 50000  | 381 |
| 90 | 73 | 270 | 155 | 700 | 248 | 2400 | 331 | 75000  | 382 |
| 95 | 76 | 270 | 159 | 750 | 256 | 2600 | 335 | 100000 | 384 |

Source: Krejcie and Morgan (1970)

Note: "N" is population size; "S" is sample size.

## Appendix B: Actual Field Work Reliability Analysis Scale

(Cronbach's coefficient alpha)

**Appendix B: Table 16. Activist Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 2        | 13.636                     | 35.399                         | 0.670                            | 0.780                 |
| 3        | 13.321                     | 40.608                         | 0.458                            | 0.838                 |
| 4        | 13.600                     | 34.285                         | 0.716                            | 0.765                 |
| 5        | 13.314                     | 40.735                         | 0.474                            | 0.833                 |
| 16       | 13.671                     | 33.258                         | 0.821                            | 0.734                 |

**Appendix B: Table 17. Reliability Coefficients N of Cases = 140, N of Items = 5**

|                              | Activist |
|------------------------------|----------|
| Cronbach's coefficient alpha | 0.828    |

**Appendix B: Table 18. Pragmatist Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 7        | 12.614                     | 21.275                         | 0.787                            | 0.759                 |
| 8        | 13.307                     | 26.761                         | 0.530                            | 0.832                 |
| 9        | 12.529                     | 20.913                         | 0.800                            | 0.754                 |
| 10       | 13.143                     | 25.649                         | 0.513                            | 0.837                 |
| 17       | 12.721                     | 23.728                         | 0.580                            | 0.821                 |

**Appendix B: Table 19. Reliability Coefficients N of Cases = 140, N of Items = 5**

|                              | Pragmatist |
|------------------------------|------------|
| Cronbach's coefficient alpha | 0.837      |

**Appendix B: Table 20. Table 10 Reflector Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 12       | 12.964                     | 39.790                         | 0.643                            | 0.790                 |
| 13       | 13.929                     | 43.391                         | 0.525                            | 0.822                 |
| 14       | 13.079                     | 39.800                         | 0.654                            | 0.786                 |
| 15       | 13.829                     | 41.309                         | 0.602                            | 0.801                 |
| 18       | 13.571                     | 39.642                         | 0.709                            | 0.771                 |

**Appendix B: Table 21. Reliability Coefficients N of Cases = 140, N of Items = 5**

|                              | Reflector |
|------------------------------|-----------|
| Cronbach's coefficient alpha | 0.829     |

**Appendix B: Table 22. Theorist Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 1        | 13.479                     | 39.072                         | 0.534                            | 0.834                 |
| 6        | 14.064                     | 38.377                         | 0.576                            | 0.822                 |
| 11       | 13.229                     | 35.444                         | 0.696                            | 0.789                 |
| 19       | 13.964                     | 35.229                         | 0.737                            | 0.778                 |
| 20       | 13.493                     | 36.899                         | 0.663                            | 0.799                 |

**Appendix B: Table 23. Reliability Coefficients N of Cases = 140, N of Items = 5**

|                              | Theorist |
|------------------------------|----------|
| Cronbach's coefficient alpha | 0.838    |

## Leadership Style

**Appendix B: Table 24. Transformational Leadership Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 21       | 25.150                     | 80.200                         | 0.548                            | 0.838                 |
| 22       | 25.093                     | 85.740                         | 0.346                            | 0.851                 |
| 23       | 25.250                     | 80.333                         | 0.531                            | 0.839                 |
| 24       | 25.107                     | 82.931                         | 0.463                            | 0.844                 |
| 28       | 25.143                     | 80.080                         | 0.530                            | 0.839                 |
| 29       | 25.043                     | 81.912                         | 0.506                            | 0.841                 |
| 30       | 25.293                     | 78.971                         | 0.546                            | 0.838                 |
| 31       | 25.221                     | 80.418                         | 0.501                            | 0.842                 |
| 35       | 25.286                     | 78.666                         | 0.577                            | 0.836                 |
| 36       | 25.157                     | 80.709                         | 0.493                            | 0.842                 |
| 37       | 25.279                     | 77.440                         | 0.601                            | 0.834                 |
| 38       | 25.007                     | 79.475                         | 0.603                            | 0.834                 |

**Appendix B: Table 25. Reliability Coefficients N of Cases = 140, N of Items = 12**

|                              |                             |
|------------------------------|-----------------------------|
|                              | Transformational leadership |
| Cronbach's coefficient alpha | 0.851                       |

**Appendix B: Table 26. Transactional Leadership Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 25       | 10.864                     | 29.413                         | 0.519                            | 0.864                 |
| 26       | 11.014                     | 27.108                         | 0.628                            | 0.847                 |
| 32       | 10.921                     | 26.994                         | 0.698                            | 0.834                 |
| 33       | 10.929                     | 25.722                         | 0.742                            | 0.825                 |
| 39       | 10.843                     | 27.299                         | 0.625                            | 0.847                 |
| 40       | 10.821                     | 25.615                         | 0.738                            | 0.826                 |

**Appendix B: Table 27. Reliability Coefficients N of Cases = 140, N of Items = 6**

|                              |                          |
|------------------------------|--------------------------|
|                              | Transactional leadership |
| Cronbach's coefficient alpha | 0.864                    |

**Appendix B: Table 28. Laissez-faire Leadership Item-total Statistics**

| Question | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Alpha if item deleted |
|----------|----------------------------|--------------------------------|----------------------------------|-----------------------|
| 27       | 2.579                      | 1.627                          | 0.724                            | 0.749                 |
| 34       | 2.550                      | 1.530                          | 0.747                            | 0.723                 |
| 41       | 2.586                      | 1.568                          | 0.629                            | 0.845                 |

**Appendix B: Table 29. Reliability Coefficients N of Cases = 140, N of Items = 3**

|                              | Laissez-faire leadership |
|------------------------------|--------------------------|
| Cronbach's coefficient alpha | 0.836                    |

### **Tests of Normality**

#### **Organisational Effectiveness**

**Appendix B: Table 30. Test of Normality**

|                              | Kolmogorov-Smirnov |       |
|------------------------------|--------------------|-------|
|                              | df                 | Sig.  |
| Organisational Effectiveness | 140                | 0.200 |

H<sub>0</sub>: the sample is normal distribution.

H<sub>1</sub>: the sample is not normal distribution.

The results indicates that P-value is 0.200 which is greater than 0.050. Therefore, I do not reject the null hypothesis. This means that the sample is normal distribution.

## Appendix C: Pilot study questionnaire

This questionnaire will contribute to my PhD research at the Birmingham Business School, University of Birmingham. Your answers are confidential and will be used for educational purposes only. All those completing the questionnaire will receive a copy of the results for the sector, although no individual companies will be identified. Please read the statement below, and tick the box which best applies to you.

### Section 1: Respondents' profile

1. What is your gender?

Male

Female

2. How old are you?

.....

3. What is your highest education level?

Elementary School

Junior High School

Senior High School/ Vocational School

College Diploma/ Higher Vocational School

Bachelor's Degree

Master's Degree

Ph.D.

Others, please be specific.....

4. Please specify the date/month/year you start your management career in tyre firm.....

5. Could you specify the number of employees in your company?

.....

## Section 2: Learning Styles

Please consider the statement below carefully and select the most appropriate answer. (Note: Strongly Agree = 6, Moderately Agree = 5, Agree = 4, Disagree = 3, Moderately Disagree 2, Strongly Disagree = 1)

| Learning Style  | Strongly Agree | Moderately Agree | Agree | Disagree | Moderately Disagree | Strongly Disagree |
|---|----------------|------------------|-------|----------|---------------------|-------------------|
| 6. I am keen on basic assumptions, principles, theories, models and systems thinking.                       |                |                  |       |          |                     |                   |
| 7. I tend to act first and consider the consequences later.   |                |                  |       |          |                     |                   |
| 8. I like to try anything that is challenging.  |                |                  |       |          |                     |                   |
| 9. I prefer to find solutions to problems by brainstorming.   |                |                  |       |          |                     |                   |
| 10. I am optimistic about anything new and therefore unlikely to resist change.                             |                |                  |       |          |                     |                   |
| 11. I like to analyse and study situations beforehand.  |                |                  |       |          |                     |                   |
| 12. I like to seek new ideas and take the first opportunity to experiment with applications.                |                |                  |       |          |                     |                   |
| 13. I like to get on with things and act quickly and confidently on ideas that are interesting.             |                |                  |       |          |                     |                   |
| 14. I tend to be impatient with ruminating and open-ended discussion.                                       |                |                  |       |          |                     |                   |
| 15. I am essentially practical in my approach to problem solving.   |                |                  |       |          |                     |                   |
| 16. I approach problem solving in a step by step, rational and logical manner                               |                |                  |       |          |                     |                   |
| 17. I tend to be a thoughtful, thorough and methodical person.  |                |                  |       |          |                     |                   |
| 18. I like to analyse matters by analysing experiences and observing them from many different perspectives. |                |                  |       |          |                     |                   |
| 19. Before making any decision I tend to consider all possible angles and implications.                     |                |                  |       |          |                     |                   |
| 20. I work well under pressure and tight deadline.  |                |                  |       |          |                     |                   |
| 21. I enjoy learning new things and practices.  |                |                  |       |          |                     |                   |
| 22. I like to try out ideas, theories and techniques to see if they work in practice.                       |                |                  |       |          |                     |                   |
| 23. I like to listen to others and get the drift of the discussion before making my own points.             |                |                  |       |          |                     |                   |
| 24. I like to complete tasks in such a way that they fit into a rational scheme.                            |                |                  |       |          |                     |                   |
| 25. I prefer to find out the causes of problems before deciding the best way to solve them.                 |                |                  |       |          |                     |                   |

### Section 3: Leadership Styles

Please consider the statement below carefully and select the most appropriate answer. (Note: Never = 0, Seldom = 1, Occasionally = 2, Frequently = 3, Always = 4)

| Leadership Style  | Always | Frequently | Occasionally | Seldom | Never |
|---|--------|------------|--------------|--------|-------|
| 26. I like to make others feel good.  |        |            |              |        |       |
| 27. I would prefer to communicate using uncomplicated language.   |        |            |              |        |       |
| 28. I tend to persuade others to think of new ways to solve problems.                                   |        |            |              |        |       |
| 29. I usually help others to develop themselves.  |        |            |              |        |       |
| 30. I prefer to let others know exactly what they should do in order to achieve their goals.            |        |            |              |        |       |
| 31. I am satisfied when I perceived that others have performed well.                                    |        |            |              |        |       |
| 32. I would let others do their work in the way they think best.  |        |            |              |        |       |
| 33. Others tend to give a lot of respect to me.   |        |            |              |        |       |
| 34. I make others feel that they can accomplish their assigned tasks.                                   |        |            |              |        |       |
| 35. I usually provide others with new ideas to solve tough problems.                                    |        |            |              |        |       |
| 36. I provide feed back when others are performing their assigned tasks.                                |        |            |              |        |       |
| 37. I reward others and make them feel appreciated when they have completed assigned tasks.             |        |            |              |        |       |
| 38. As long as the tasks have been accomplished, I will not make any changes to the working method.     |        |            |              |        |       |
| 39. I tend to support whatsoever method others have decided to employ in order to complete their tasks. |        |            |              |        |       |
| 40. Others feel that I am pleasant to work with.  |        |            |              |        |       |
| 41. I help others find ways to accomplish their assigned tasks.   |        |            |              |        |       |
| 42. I tend to encourage others to think in different and unconventional ways.                           |        |            |              |        |       |
| 43. I am aware and try to pay special attention to others who have been isolated from the workplace.    |        |            |              |        |       |
| 44. I usually reward others after their assigned tasks have been accomplished.                          |        |            |              |        |       |
| 45. I provide others with standard approaches to accomplish their assigned tasks.                       |        |            |              |        |       |
| 46. I prefer not to ask anything from others unless it is necessary.                                    |        |            |              |        |       |

Noted: Others mean subordinates or customers.

**Section 4: Organisational Effectiveness**

47. Please specify the amount of net income after tax and sales in the blanks.

| Year | Net Profit After Tax | Sales |
|------|----------------------|-------|
| 2001 |                      |       |
| 2002 |                      |       |
| 2003 |                      |       |
| 2004 |                      |       |
| 2005 |                      |       |

48. If you do not have the financial data, could you estimate your company's financial performance by providing score when comparing with other firms in your sector? (Possible mark is 100)

.....

**Thank you for your participation**

## Appendix D: Actual field work questionnaire

This questionnaire will contribute to my PhD research at the Birmingham Business School, University of Birmingham. Your answers are confidential and will be used for educational purposes only. All those completing the questionnaire will receive a copy of the results for the sector, although no individual companies will be identified. Please read the statement below, and tick the box which best applies to you.

### Section 1: Learning Styles

Please consider the statement below carefully and select the most appropriate answer. (Note: Strongly Agree = 6, Moderately Agree = 5, Agree = 4, Disagree = 3, Moderately Disagree 2, Strongly Disagree = 1)

| Learning Style  | Strongly Agree | Moderately Agree | Agree | Disagree | Moderately Disagree | Strongly Disagree |
|---|----------------|------------------|-------|----------|---------------------|-------------------|
| 1. I am keen on basic assumptions, principles, theories, models and systems thinking.                       |                |                  |       |          |                     |                   |
| 2. I tend to act first and consider the consequences later.   |                |                  |       |          |                     |                   |
| 3. I like to try anything that is challenging.  |                |                  |       |          |                     |                   |
| 4. I prefer to find solutions to problems by brainstorming.   |                |                  |       |          |                     |                   |
| 5. I am optimistic about anything new and therefore unlikely to resist change.                              |                |                  |       |          |                     |                   |
| 6. I like to analyse and study situations beforehand.   |                |                  |       |          |                     |                   |
| 7. I like to seek new ideas and take the first opportunity to experiment with applications.                 |                |                  |       |          |                     |                   |
| 8. I like to get on with things and act quickly and confidently on ideas that are interesting.              |                |                  |       |          |                     |                   |
| 9. I tend to be impatient with ruminating and open-ended discussion.  |                |                  |       |          |                     |                   |
| 10. I am essentially practical in my approach to problem solving.   |                |                  |       |          |                     |                   |
| 11. I approach problem solving in a step by step, rational and logical manner                               |                |                  |       |          |                     |                   |
| 12. I tend to be a thoughtful, thorough and methodical person.  |                |                  |       |          |                     |                   |
| 13. I like to analyse matters by analysing experiences and observing them from many different perspectives. |                |                  |       |          |                     |                   |
| 14. Before making any decision I tend to consider all possible angles and implications.                     |                |                  |       |          |                     |                   |
| 15. I work well under pressure and a tight deadline.  |                |                  |       |          |                     |                   |
| 16. I enjoy learning new things and practices.  |                |                  |       |          |                     |                   |
| 17. I like to try out ideas, theories and techniques to see if they work in practice.                       |                |                  |       |          |                     |                   |
| 18. I like to listen to others and get the drift of the discussion before making my own points.             |                |                  |       |          |                     |                   |
| 19. I like to complete tasks in such a way that they fit into a rational scheme.                            |                |                  |       |          |                     |                   |

|   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| 20. I prefer to find out the causes of problems before deciding the best way to solve them. |  |  |  |  |  |  |
|---|--|--|--|--|--|--|

**Section 2: Leadership Styles**

Please consider the statement below carefully and select the most appropriate answer. (Note: Never = 0, Seldom = 1, Occasionally = 2, Frequently = 3, Always = 4)

| Leadership Style  | Always | Frequently | Occasionally | Seldom | Never |
|---|--------|------------|--------------|--------|-------|
| 21. I like to make others feel good.  |        |            |              |        |       |
| 22. I would prefer to communicate using uncomplicated language.   |        |            |              |        |       |
| 23. I tend to persuade others to think of new ways to solve problems.                                   |        |            |              |        |       |
| 24. I usually help others to develop themselves.  |        |            |              |        |       |
| 25. I prefer to let others know exactly what they should do in order to achieve their goals.            |        |            |              |        |       |
| 26. I am satisfied when I perceive that others have performed well.                                     |        |            |              |        |       |
| 27. I would let others do their work in the way they think best.  |        |            |              |        |       |
| 28. Others tend to have a lot of respect for me.  |        |            |              |        |       |
| 29. I make others feel that they can accomplish their assigned tasks.                                   |        |            |              |        |       |
| 30. I usually provide others with new ideas to solve tough problems.                                    |        |            |              |        |       |
| 31. I provide feedback when others are performing their assigned tasks.                                 |        |            |              |        |       |
| 32. I reward others and make them feel appreciated when they have completed assigned tasks.             |        |            |              |        |       |
| 33. As long as the tasks have been accomplished, I will not make any changes to the working method.     |        |            |              |        |       |
| 34. I tend to support whatsoever method others have decided to employ in order to complete their tasks. |        |            |              |        |       |
| 35. Others feel that I am pleasant to work with.  |        |            |              |        |       |
| 36. I help others find ways to accomplish their assigned tasks.   |        |            |              |        |       |
| 37. I tend to encourage others to think in different and unconventional ways.                           |        |            |              |        |       |
| 38. I am aware and try to pay special attention to others who have been isolated from the workplace.    |        |            |              |        |       |
| 39. I usually reward others after their assigned tasks have been accomplished.                          |        |            |              |        |       |
| 40. I provide others with standard approaches to accomplish their assigned tasks.                       |        |            |              |        |       |
| 41. I prefer not to ask anything from others unless it is necessary.                                    |        |            |              |        |       |

Noted: Others mean subordinates or customers.

**Section 3: Organisational Effectiveness**

42. Please specify the amount of net income after tax and sales in the blanks.

| Year | Net Profit After Tax | Sales |
|------|----------------------|-------|
| 2001 |                      |       |
| 2002 |                      |       |
| 2003 |                      |       |
| 2004 |                      |       |
| 2005 |                      |       |

43. If you do not have the financial data, could you estimate your company's financial performance by providing score when comparing with other firms in your sector? (Possible mark is 100)

.....

**Section 4: Respondents' profile**

44. What is your gender?

- Male  Female

45. What is your date of birth.....?

46. What is your highest educational level?

- Elementary School
- Junior High School
- Senior High School/ Vocational School
- College Diploma/ Higher Vocational School
- Bachelor's Degree
- Master's Degree
- Ph.D.
- Others, please be specific.....

47. Please specify the date/month/year you start your management career in tyre firm.....

48. Could you specify the number of employees in your company?

.....

**Thank you for your participation**

## **Appendix E: Pilot Study Semi-Structured Interviewing Questions**

1. What is your date of birth?
2. What is your educational background?
3. How long have you participated in this business?
4. Could you share with me how you started in this business and what you did to improve your company's performance?
5. In your opinion, what would be the key factors to achieve customers' satisfaction?
6. As manager, what are your key responsibilities in this organisation?
7. How do you encourage your employees to develop their skills?
8. In the future, how do you intend to further develop your employees' skills?

## **Appendix F: Follow-up Semi-Structured Interviewing Questions**

1. What is your date of birth?

2. What is your educational background?

3. How long have you participated in this business?

3.1 What events led you to participate in this business?

3.2 What kinds of experience do you think beneficial to you in running this business?

3.3 What are the key factors that affect the transfer of knowledge and skills to your employees?

4. What do you like most/least about working in this business?

4.1 Many managers have come across different kinds of challenges when dealing with employees; do you have an opinion on this?

4.2 Many managers have come across different kinds of challenges when dealing with customers; do you have an opinion on this?

5. In your opinion, what would be the key factors in achieving customers' satisfaction?

5.1 How do you organise contribution and job descriptions in your firm?

5.2 How far are training and development necessary to the success of the firm?

6. As manager, what are your key responsibilities in this organisation?

6.1 How important is forecasting the trend of the market in terms of managing the performance of the company?

6.2 How important is it to discuss company-related matters with your employees?

7. How do you encourage your employees to develop their skills?

8. In the future, how do you intend to further develop your employees' skills?

## Appendix G: Coefficient Value

**Appendix G: Table 31. Coefficient Correlations**

| Independent Variables       | Number of Employees | Experience | Gender | Education | Age    | Reflector | Pragmatist | Theorist | Activist | Laissez-faire Leadership | Transactional Leadership | Transformational Leadership |
|-----------------------------|---------------------|------------|--------|-----------|--------|-----------|------------|----------|----------|--------------------------|--------------------------|-----------------------------|
| Number of Employees         | 1.000               |            |        |           |        |           |            |          |          |                          |                          |                             |
| Experience                  | -0.001              | 1.000      |        |           |        |           |            |          |          |                          |                          |                             |
| Gender                      | -0.135              | 0.179      | 1.000  |           |        |           |            |          |          |                          |                          |                             |
| Education                   | 0.015               | 0.309      | -0.158 | 1.000     |        |           |            |          |          |                          |                          |                             |
| Age                         | 0.030               | -0.301     | 0.036  | 0.043     | 1.000  |           |            |          |          |                          |                          |                             |
| Reflector                   | -0.052              | -0.044     | 0.073  | -0.028    | -0.036 | 1.000     |            |          |          |                          |                          |                             |
| Pragmatist                  | -0.191              | -0.059     | -0.026 | -0.086    | -0.050 | -0.053    | 1.000      |          |          |                          |                          |                             |
| Theorist                    | 0.266               | -0.131     | -0.027 | 0.010     | -0.186 | -0.129    | 0.047      | 1.000    |          |                          |                          |                             |
| Activist                    | 0.127               | -0.080     | -0.159 | 0.031     | -0.032 | 0.172     | 0.141      | 0.426    | 1.000    |                          |                          |                             |
| Laissez-faire Leadership    | 0.014               | -0.069     | -0.119 | 0.017     | 0.011  | -0.073    | -0.058     | -0.057   | -0.082   | 1.000                    |                          |                             |
| Transactional Leadership    | 0.013               | -0.047     | -0.124 | 0.001     | 0.112  | 0.132     | 0.022      | 0.043    | 0.164    | 0.001                    | 1.000                    |                             |
| Transformational Leadership | -0.257              | -0.041     | -0.010 | -0.008    | 0.072  | -0.186    | -0.233     | -0.096   | 0.258    | 0.199                    | 0.068                    | 1.000                       |

Dependent Variable: Organisational Effectiveness

**Appendix G: Table 32. Collinearity Diagnostics**

| Independent Variables       | Condition Index | Variance Proportions |        |           |            |                     |          |            |           |          |                             |                          |                          |
|-----------------------------|-----------------|----------------------|--------|-----------|------------|---------------------|----------|------------|-----------|----------|-----------------------------|--------------------------|--------------------------|
|                             |                 | Age                  | Gender | Education | Experience | Number of Employees | Activist | Pragmatist | Reflector | Theorist | Transformational Leadership | Transactional Leadership | Laissez-Faire Leadership |
| Age                         | 3.541           | 0.00                 | 0.37   | 0.00      | 0.05       | 0.10                | 0.00     | 0.00       | 0.00      | 0.01     | 0.00                        | 0.00                     | 0.00                     |
| Gender                      | 3.825           | 0.00                 | 0.11   | 0.00      | 0.00       | 0.46                | 0.01     | 0.00       | 0.00      | 0.00     | 0.00                        | 0.00                     | 0.01                     |
| Education                   | 5.950           | 0.00                 | 0.04   | 0.02      | 0.44       | 0.11                | 0.02     | 0.01       | 0.04      | 0.02     | 0.01                        | 0.00                     | 0.01                     |
| Experience                  | 6.140           | 0.00                 | 0.46   | 0.01      | 0.12       | 0.04                | 0.08     | 0.00       | 0.03      | 0.04     | 0.00                        | 0.03                     | 0.03                     |
| Number of Employees         | 7.406           | 0.00                 | 0.00   | 0.00      | 0.02       | 0.00                | 0.02     | 0.00       | 0.05      | 0.00     | 0.00                        | 0.64                     | 0.14                     |
| Activist                    | 8.292           | 0.01                 | 0.00   | 0.02      | 0.01       | 0.02                | 0.10     | 0.01       | 0.00      | 0.02     | 0.01                        | 0.08                     | 0.66                     |
| Pragmatist                  | 9.841           | 0.01                 | 0.01   | 0.02      | 0.00       | 0.00                | 0.01     | 0.06       | 0.79      | 0.15     | 0.00                        | 0.08                     | 0.01                     |
| Reflector                   | 10.322          | 0.02                 | 0.00   | 0.00      | 0.03       | 0.21                | 0.03     | 0.49       | 0.00      | 0.30     | 0.02                        | 0.00                     | 0.04                     |
| Theorist                    | 12.106          | 0.02                 | 0.00   | 0.77      | 0.26       | 0.00                | 0.10     | 0.09       | 0.00      | 0.04     | 0.01                        | 0.01                     | 0.01                     |
| Transformational Leadership | 13.446          | 0.04                 | 0.00   | 0.01      | 0.00       | 0.04                | 0.00     | 0.26       | 0.05      | 0.03     | 0.76                        | 0.00                     | 0.06                     |
| Transactional Leadership    | 14.972          | 0.73                 | 0.01   | 0.00      | 0.06       | 0.01                | 0.20     | 0.05       | 0.01      | 0.30     | 0.01                        | 0.00                     | 0.00                     |
| Laissez-faire Leadership    | 33.775          | 0.17                 | 0.00   | 0.14      | 0.00       | 0.00                | 0.42     | 0.03       | 0.02      | 0.08     | 0.17                        | 0.15                     | 0.04                     |

Dependent Variable: Organisational Effectiveness

**Appendix G: Table 33. Collinearity Statistics**

|                             | Collinearity Statistics |       |
|-----------------------------|-------------------------|-------|
|                             | Tolerance               | VIF   |
| Age                         | 0.770                   | 1.299 |
| Gender                      | 0.804                   | 1.243 |
| Education                   | 0.810                   | 1.234 |
| Experience                  | 0.681                   | 1.469 |
| Number of Employees         | 0.724                   | 1.380 |
| Activist                    | 0.513                   | 1.950 |
| Pragmatist                  | 0.740                   | 1.351 |
| Reflector                   | 0.720                   | 1.389 |
| Theorist                    | 0.597                   | 1.674 |
| Transformational Leadership | 0.552                   | 1.813 |
| Transactional Leadership    | 0.924                   | 1.082 |
| Laissez-faire Leadership    | 0.906                   | 1.103 |

Dependent Variable: Organisational Effectiveness

## Appendix H: A Standard Heckman test for response bias

Heckman selection model (Regression model with sample selection)

Number of respondents = 220

Censored respondents = 80

Uncensored respondents = 140

Wald chi2 (12) = 586.510

Prob > chi2 = 0.000

Log likelihood = -534.474

**Appendix H: Table 34. A Standard Heckman test for response bias**

| Variables           | Coefficients | Standard Error |
|---------------------|--------------|----------------|
| Constant            | 69.016       | 3.612          |
| Number of Employees | 0.052        | 0.361          |
| Age                 | 0.020        | 0.030          |
| Gender              | -0.042       | 0.777          |
| Education           | 0.074        | 0.103          |
| Experience          | 0.013        | 0.042          |
| Activist            | -0.470       | 0.066          |
| Pragmatist          | 0.268        | 0.065          |
| Reflector           | 0.294        | 0.049          |
| Theorist            | -0.181       | 0.057          |
| Transformational    | 1.163        | 0.184          |
| Transactional       | 0.141        | 0.112          |
| Laissez-faire       | -0.622       | 0.198          |
| <b>Select</b>       |              |                |
| Constant            | 0.412        | 0.135          |
| Northeast1 (Dummy)  | -0.110       | 0.179          |
| Northeast2 (Dummy)  | -0.105       | 0.180          |
| rho                 | -0.805       | 0.112          |
| sigma               | 4.948        | 0.540          |
| lambda              | -3.985       | 0.951          |

Note: 1.) LR Test of independents variables ( $\rho = 0$ ),  $\chi^2(1) = 2.47$ , Prob >  $\chi^2 = 0.115$

2.) Northeast3 was dropped because it is important to exclude one of the dummy variables from the regression model to avoid collinearity or dummy variable trap.

## Appendix I: Additional Statistical Findings

### Hypothesis A: Impact of the Number of Employees and Demographics of Respondents on Learning Styles

Number of employees was used to classify the size of the firm. In addition, the demographics of respondents are composed of gender, age, education and experience. Hence, the Independent Samples T-Test is first applied to test whether the number of employees and gender of the respondent affect learning styles.

#### Number of Employees and Learning Styles

Activist

$H_0: \sigma^2_{\text{Small firm}} = \sigma^2_{\text{Large firm}}$ , there is no significant difference between the variance of small and large firms.

$H_1: \sigma^2_{\text{Small firm}} \neq \sigma^2_{\text{Large Firm}}$ , there is significant difference between the variance of small and large firms.

**Appendix I: Table 35. Independent Samples T-Test**

|          |                         | Levene's Test for Equality of Variances | T-test for Equality of Means |                 |
|----------|-------------------------|---|------------------------------|-----------------|
|          |                         | Sig                                     | Sig (2-tailed)               | Mean Difference |
| Activist | Equal variances assumed | 0.132                                   | 0.024                        | 3.070           |

Levene's Test for Equality of variances is applied to suggest the difference of variance between groups of independent variables. If the P-Value is greater than 0.05, the null hypothesis will be accepted. This means that the variances of two

groups are equal. Afterwards the results in the Equal variances assumed method will be used to test the hypothesis. On the other hand, if the P-Value is equal to or lower than 0.05, the null hypothesis will be rejected and the results in the Equal variances not assumed method will be applied. From Table 35 above, the P-Value = 0.132 which is greater than 0.05. Therefore, the null hypothesis is accepted. This suggests that there is no significant difference between the variances of small and large firms. As a result, the hypothesis is tested by the Equal variance assumed method.

H<sub>0</sub>: There is no significant difference between number of employees and Activist.

H<sub>1</sub>: There is significant difference between number of employees and Activist.

Independent Samples T-Test shows that P-Value = 0.024 which is lower than 0.05; therefore, the null hypothesis is rejected; there is significant difference between number of employees and activist. Hence, it can be concluded that number of employees impact on Activist. Further, the mean difference of small and large firms is 3.070. Hence, it could be supposed that the small firm is more likely to be related to Activist than the large firm.

Pragmatist

H<sub>0</sub>:  $\sigma^2_{\text{Small firm}} = \sigma^2_{\text{Large firm}}$ , there is no significant difference between the variance of small and large firms.

H<sub>1</sub>:  $\sigma^2_{\text{Small firm}} \neq \sigma^2_{\text{Large firm}}$ , there is significant difference between the variance of small and large firms.

Levene's Test for Equality of Variances indicates P-Value = 0.942 which is greater than 0.05. Therefore, the null hypothesis is accepted. This proposes that there is no significant difference between the variance of small and large firms. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

H<sub>0</sub>: There is no significant difference between number of employees and Pragmatist.

H<sub>1</sub>: There is significant difference between number of employees and Pragmatist.

Independent Samples T-Test shows that P-Value = 0.000 which is lower than 0.05. Therefore, the null hypothesis is rejected; there is significant difference between number of employees and Pragmatist. Hence, it can be concluded that number of employees has an impact on Pragmatist. Further, the mean difference of small and large firms is -3.850. Hence, it could be supposed that a small firm is less likely to be related to Pragmatist than is a large firm.

Reflector

H<sub>0</sub>:  $\sigma^2_{\text{Small firm}} = \sigma^2_{\text{Large firm}}$ , there is no significant difference between the variance of small and large firms.

H<sub>1</sub>:  $\sigma^2_{\text{Small firm}} \neq \sigma^2_{\text{Large firm}}$ , there is significant difference between the variance of small and large firms.

Levene's Test for Equality of Variances indicates P-Value = 0.161 which is greater than 0.05. Therefore, the null hypothesis is accepted. This proposes that there is no significant difference between the variance of small and large firms.

As a result, the hypothesis will be tested by the Equal Variance Assumed method.

H<sub>0</sub>: There is no significant difference between number of employees and Reflector.

H<sub>1</sub>: There is significant difference between number of employees and Reflector.

Independent Samples T-Test shows that P-Value = 0.059 which is greater than 0.05. Therefore, the null hypothesis is accepted; there is no significant difference between number of employees and Reflector. Hence, it can be concluded that number of employees does not impact on Reflector.

Theorist

H<sub>0</sub>:  $\sigma^2_{\text{Small firm}} = \sigma^2_{\text{Large firm}}$ , there is no significant difference between the variance of small and large firms.

H<sub>1</sub>:  $\sigma^2_{\text{Small firm}} \neq \sigma^2_{\text{Large firm}}$ , there is significant difference between the variance of small and large firms.

Levene's Test for Equality of Variances indicates P-Value = 0.724 which is greater than 0.05. Therefore, the null hypothesis is accepted. This proposes that there is no significant difference between the variance of small and large firms.

As a result, the hypothesis will be tested by the Equal Variance Assumed method.

H<sub>0</sub>: There is no significant difference between number of employees and Theorist.

H<sub>1</sub>: There is significant difference between number of employees and Theorist.

Independent Samples T-Test shows that P-Value = 0.383 which is greater than 0.05. Therefore, the null hypothesis is accepted; there is no significant difference between number of employees and Theorist. Hence, it can be concluded that number of employees does not impact Theorist.

## Summary

**Appendix I: Table 36. Relationship between Number of Employees and Learning Styles**

| Variable "X"        | Variable "Y" | Relationship  |
|---------------------|--------------|---|
| Number of Employees | Activist     | Significantly related; positive correlation with small firm |
|                     | Pragmatist   | Significantly related; positive correlation with large firm |
|                     | Reflector    | No relationship   |
|                     | Theorist     | No relationship   |

Table 36 reports that the number of employees is correlated with both Activist and Pragmatist. Activist is significantly correlated with the small firm whilst Pragmatist is significantly correlated with the large firm. However, there is no correlation among number of employees and Reflector and Theorist.

## Gender and Learning Styles

### Activist

H<sub>0</sub>:  $\sigma^2_{\text{Male manager}} = \sigma^2_{\text{Female manager}}$ , there is no significant difference between the variance of male and female managers.

H<sub>1</sub>:  $\sigma^2_{\text{Male manager}} \neq \sigma^2_{\text{Female manager}}$ , there is significant difference between the variance of male and female managers.

Levene's Test for Equality of Variances indicates P-Value = 0.940 which is greater than 0.05. Therefore, the null hypothesis is accepted. This suggests that there is no significant difference between the variances of male and female managers. As a result, the hypothesis is tested by the Equal variance assumed method.

H<sub>0</sub>: There is no significant difference between gender and Activist.

H<sub>1</sub>: There is significant difference between gender and Activist.

Independent Samples T-Test shows that P-Value = 0.018 which is lower than 0.05; therefore, the null hypothesis is rejected; there is significant difference between gender and activist. Hence, it can be concluded that gender has an impact on Activist. Further, the mean difference of male and female managers is -3.18. Hence, it could be supposed that a female manager is more likely to be Activist than a male manager.

Pragmatist

H<sub>0</sub>:  $\sigma^2_{\text{Male manager}} = \sigma^2_{\text{Female manager}}$ , there is no significant difference between the variance of male and female managers.

H<sub>1</sub>:  $\sigma^2_{\text{Male manager}} \neq \sigma^2_{\text{Female manager}}$ , there is significant difference between the variance of male and female managers.

Levene's Test for Equality of Variances indicates P-Value = 0.656 which is greater than 0.05. Therefore, the null hypothesis is accepted. This proposes that

there is no significant difference between the variance of male manager and female manager. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

H<sub>0</sub>: There is no significant difference between gender and Pragmatist.

H<sub>1</sub>: There is significant difference between gender and Pragmatist.

Independent Samples T-Test shows that P-Value = 0.866 which is greater than 0.05. Therefore, the null hypothesis is accepted, there is no significant difference between gender and pragmatist. Hence, it can be concluded that gender does not impact Pragmatist.

Reflector

H<sub>0</sub>:  $\sigma^2_{\text{Male manager}} = \sigma^2_{\text{Female manager}}$ , there is no significant difference between the variance of male and female managers.

H<sub>1</sub>:  $\sigma^2_{\text{Male manager}} \neq \sigma^2_{\text{Female manager}}$ , there is significant difference between the variance of male and female managers.

Levene's Test for Equality of Variances indicates that P-Value = 0.554 which is greater than 0.05. Hence, the null hypothesis is accepted. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

H<sub>0</sub>: There is no significant difference between gender and Reflector.

H<sub>1</sub>: There is significant difference between gender and Reflector.

Independent Samples T-Test shows that P-Value = 0.040 which is lower than 0.05. Therefore, the null hypothesis is rejected. This means that there is significant difference between gender and Reflector. Hence, it can be concluded that gender has an impact on Reflector. Besides, the mean difference of male and female managers is 2.93, so it could be supposed that a male manager is more likely to be Reflector than a female manager.

Theorist

$H_0: \sigma^2_{\text{Male manager}} = \sigma^2_{\text{Female manager}}$ , there is no significant difference between the variance of male and female manager.

$H_1: \sigma^2_{\text{Male manager}} \neq \sigma^2_{\text{Female manager}}$ , there is significant difference between the variance of male and female manager.

Levene's Test for Equality of Variances indicates that P-Value = 0.402 which is greater than 0.05. Therefore, the null hypothesis is accepted. There is no significant difference between the variance of Theorist male manager and Theorist female manager. As a result, the hypothesis will be tested by the Equal Variance Assumed method.

$H_0$ : There is no significant difference between gender and Theorist.

$H_1$ : There is significant difference between gender and Theorist.

Independent Samples T-Test shows that P-Value = 0.021 which is lower than 0.05. Therefore, the null hypothesis is rejected. This means that there is significant difference between gender and Theorist. Hence, it can be concluded

that gender has an impact on Theorist. Moreover, the mean difference between male and female managers is 3.10; it could be supposed that a male manager is more likely to be Theorist than a female manager.

## Summary

**Appendix I: Table 37. Relationship between Gender and Learning Styles**

| Variable "X" | Variable "Y" | Relationship  |
|--------------|--------------|---|
| Gender       | Activist     | Significantly related; positive correlation with female manager |
|              | Pragmatist   | No relationship   |
|              | Reflector    | Significantly related; positive correlation with male manager   |
|              | Theorist     | Significantly related; positive correlation with male manager   |

Table 37 reports that gender is correlated with Activist, Reflector and Theorist. On the other hand, there is no relationship between gender and Pragmatist. Female manager is significantly correlated with Activist in contrast to Reflector and Theorist, where male manager is significantly correlated.

## Age and Learning Style

### Activist

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean groups of age and Activist.

$H_1$ : at least one mean group is different from the others.

**Appendix I: Table 38. ANOVA (Activist)**

|                | df  | Sig.  |
|----------------|-----|-------|
| Between Groups | 2   | 0.331 |
| Within Groups  | 137 |       |

$\mu_1$  = the mean of age (Young)

$\mu_2$  = the mean of age (Middle aged)

$\mu_3$  = the mean of age (Old)

It was found that the results of ANOVA showed that P-Value is equal to 0.331 which is greater than 0.05; therefore,  $H_0$  is accepted. There is no significant difference among mean of age groups and Activist. Hence, it can be concluded that different age ranges do not impact on Activist.

Pragmatist

$H_0$ :  $\mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean of different groups of age and Pragmatist Learning Styles.

$H_1$ : At least one mean group is different from the others.

It was found that the results of ANOVA showed that P-Value is equal to 0.827 which is greater than 0.05. Therefore,  $H_0$  is accepted. There is no significant difference among mean of age groups and Pragmatist.

Reflector

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean groups of age and Reflector.

$H_1$ : At least one mean group is different from the others

It was found that the results of ANOVA showed that P-Value is equal to 0.332 which is greater than 0.05. Therefore, the null hypothesis is accepted. There is no significant difference among mean of age groups and Reflector.

Theorist

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean groups of age and Theorist Learning Styles.

$H_1$ : At least one mean group is different from the others.

It was found that the results of ANOVA showed that P-Value is equal to 0.000 which is lower than 0.05 therefore, the null hypothesis is rejected. There is significant difference between mean groups of age and Theorist. Next, the Homogeneity of Variances is tested to verify whether the variances across samples are equal.

$H_0: \sigma^2_1 = \sigma^2_2 = \sigma^2_3$ , there is no significant difference among variances of age group.

$H_1$ : At least one variance of age group is different from the others.

It was found that the results of the Homogeneity of Variances test explained that P-Value is equal to 0.994 which is greater than 0.05; therefore, the null hypothesis is accepted. There is no significant difference among variances of different groups of age. As a result, the Tukey HSD test is used to verify the mean difference.

**Appendix I: Table 39. Multiple Comparisons: Dependent Variable (Theorist)**

| Tukey HSD | (I) Age Group | (J) Age Group | Mean Difference (I-J) | Sig   |
|-----------|---------------|---------------|-----------------------|-------|
|           | Young         | Middle aged   | -4.43(*)              | 0.010 |
|           |               | Old           | -6.21(*)              | 0.000 |
|           | Middle aged   | Young         | 4.43(*)               | 0.010 |
|           |               | Old           | -1.78                 | 0.454 |
|           | Old           | Young         | 6.21(*)               | 0.000 |
|           |               | Middle aged   | 1.78                  | 0.454 |

\* The mean difference is significant at .05 level.

Table 39 above reports a significant difference between age groups 1 (Young) and group 3 (Old), p-value = 0.000 which is lower than 0.05, mean difference = -6.21. Therefore, it shows that age group 3 (Old) is more likely to be related to theorist than the other groups.

## Summary

**Appendix I: Table 40. Relationship between Age and Learning Styles**

| Variable "X" | Variable "Y" | Relationship   |
|--------------|--------------|--|
| Age          | Activist     | No relationship  |
|              | Pragmatist   | No relationship  |
|              | Reflector    | No relationship  |
|              | Theorist     | Significantly related; group 3 (old) is more likely to be Theorist than the other groups |

Table 40 above indicates that there is no relationship between age and the variables Activist, Pragmatist, and Reflector. However, there is a significant

relationship between age and Theorist. Among the three age group categories, group 3 (Old) is more likely to be related to Theorist than the other groups.

### **Education and Learning Styles**

Activist

$H_0: \mu_i = \mu_j; i = j; 1, 2, 3, 4, 5, 6$ ; there is no significant difference between education and Activist.

$H_1$ : at least one mean group is different from the others.

Where:

$\mu_1$  = Elementary School

$\mu_2$  = Junior High School

$\mu_3$  = Senior High School/ Vocational School

$\mu_4$  = College Diploma/ Higher Vocational School

$\mu_5$  = Bachelor's Degree

$\mu_6$  = Master's Degree

It was found that the results of ANOVA showed that P-Value is equal to 0.000 which is lower than 0.05; therefore, the null hypothesis is rejected. There is significant difference between mean group of education levels and Activist. Hence, it could be concluded that different levels of education impact on Activist.

$H_0: \sigma_i^2 = \sigma_j^2; i, j = 1, 2, 3, 4, 5, 6$ ; there is no significant difference between levels of education and Activist.

$H_1$ : At least one group of variances is different from the others.

Where:

$\sigma_1$  = Elementary School

$\sigma_2$  = Junior High School

$\sigma_3$  = Senior High School/ Vocational School

$\sigma_4$  = College Diploma/ Higher Vocational School

$\sigma_5$  = Bachelor's Degree

$\sigma_6$  = Master's Degree

The results of the Homogeneity of Variances test suggest that P-Value = 0.897 which is greater than 0.05 therefore, the null hypothesis is accepted; there is no significant difference among the equality of variances of education levels. As a result, the Tukey HSD test is used to verify the mean difference. Further, the results of Post-Hoc Multiple Comparisons show exactly which pairs of groups are significantly different.

**Appendix I: Table 41. Multiple Comparisons: Dependent Variable: Activist**

| (I) Education                             | (J) Education                             | Mean Difference | Sig   |
|---|---|-----------------|-------|
| Elementary School                         | Junior High School                        | 2.96            | 0.635 |
|   | Senior High School/ Vocational School     | 7.08(*)         | 0.001 |
|   | College Diploma/ higher Vocational School | 2.67            | 0.634 |
|   | Bachelor's degree                         | -1.81           | 0.961 |
|   | Master's degree                           | -3.93           | 0.896 |
| Junior High School                        | Elementary School                         | -2.96           | 0.635 |
|   | Senior High School/ Vocational School     | 4.12            | 0.273 |
|   | College Diploma/ higher Vocational School | -.29            | 1.000 |
|   | Bachelor's degree                         | -4.77           | 0.328 |
|   | Master's degree                           | -6.89           | 0.462 |
| Senior High School/ Vocational School     | Elementary School                         | -7.08(*)        | 0.001 |
|   | Junior High School                        | -4.12           | 0.273 |
|   | College Diploma/ higher Vocational School | -4.41           | 0.119 |
|   | Bachelor's degree                         | -8.89(*)        | 0.001 |
|   | Master's degree                           | -11.01(*)       | 0.040 |
| College Diploma/ higher Vocational School | Elementary School                         | -2.67           | 0.634 |
|   | Junior High School                        | .29             | 1.000 |
|   | Senior High School/ Vocational School     | 4.41            | 0.119 |
|   | Bachelor's degree                         | -4.48           | 0.323 |
|   | Master's degree                           | -6.59           | 0.484 |
| Bachelor's degree                         | Elementary School                         | 1.81            | 0.961 |
|   | Junior High School                        | 4.77            | 0.328 |
|   | Senior High School/ Vocational School     | 8.89(*)         | 0.001 |
|   | College Diploma/ higher Vocational School | 4.48            | 0.323 |
|   | Master's degree                           | -2.12           | 0.995 |
| Master's degree                           | Elementary School                         | 3.93            | 0.896 |
|   | Junior High School                        | 6.89            | 0.462 |
|   | Senior High School/ Vocational School     | 11.01(*)        | 0.040 |
|   | College Diploma/ higher Vocational School | 6.59            | 0.484 |
|   | Bachelor's degree                         | 2.12            | 0.995 |

\* The mean difference is significant at 0.05 level.

Table 41 above reports that there is a significant difference between levels of education group 1 (Elementary School) and 3 (Senior High School/ Vocational

School),  $P\text{-value} = 0.01 < 0.05$ , mean difference = 7.08 and Age group 5 (Bachelor's Degree) and 3 (Senior High School/ Vocational School) are significant difference,  $P\text{-value} = 0.01 < 0.05$ , mean difference = 8.89; Age group 6 (Master's Degree) and 3 (Senior High School/ Vocational School) are significant difference,  $P\text{-value} = 0.04 < 0.05$ , mean difference = 11.01. Hence, it can be concluded that group 3 is less likely to be Activist when compared to other groups.

#### Pragmatist

$H_0: \mu_i = \mu_j; i = j; 1, 2, 3, 4, 5, 6$ ; there is no significant difference between education and Pragmatist.

$H_1$ : at least one mean group is different from the others.

It was found that P-Value is equal to 0.284 which is greater than 0.05 therefore, the null hypothesis is accepted. There is no significant difference between mean group of levels of education and Pragmatist. It can be concluded that different levels of education do not impact on Pragmatist.

#### Reflector

$H_0: \mu_i = \mu_j; i = j; 1, 2, 3, 4, 5, 6$ ; there is no significant difference between levels of education and Reflector.

$H_1$ : at least one mean group is different from the others.

It was found that the results of ANOVA show that P-Value is equal to 0.627 which is greater than 0.05; therefore, the null hypothesis is accepted. There is no

significant difference between mean group of levels of education and Pragmatist. It can be concluded that different levels of education do not impact on Reflector.

#### Theorist

H<sub>0</sub>:  $\mu_i = \mu_j$ ;  $i = j$ ; 1, 2, 3, 4, 5, 6; there is no significant difference between education and Theorist.

H<sub>1</sub>: at least one mean group is different from the others.

It was found that the results of ANOVA show that P-Value = 0.161 which is greater than 0.05; therefore, the null hypothesis is accepted. There is no significant difference between mean group of levels of education and Theorist. Hence, it can be concluded that different levels of education do not impact on Theorist.

#### Summary

**Appendix I: Table 42. Relationship between levels of education and learning styles**

| Variable "X" | Variable "Y" | Relationship   |
|--------------|--------------|--|
| Education    | Activist     | Significantly related; negative correlation with group 3 (Senior High School/ Vocational School) |
|              | Pragmatist   | No relationship  |
|              | Reflector    | No relationship  |
|              | Theorist     | No relationship  |

Table 42 above reports that there is evidence suggesting levels of education and Activist are significantly related. The manager who has completed Senior High School/ Vocational School is less likely to be related to Activist when compared to the other educational groups. In addition, there is no relationship between levels of education and Pragmatist, Reflector, and Theorist.

## **Experience and Learning Styles**

The length of experience is categorised into three equally-sized groups:

Group 1 = 6 years and less (Short)

Group 2 = More than 6 years but less than 16 years (Medium)

Group 3 = 16 years and above (Long)

### Activist

$H_0: \mu_i = \mu_j; i = j; 1, 2, 3$ ; there is no significant difference between experience and Activist.

$H_1$ : at least one mean group is different from the others.

It was found that the results of ANOVA showed that P-Value is equal to 0.064 which is greater than 0.05; therefore, the null hypothesis is accepted. There is no significant difference between mean groups of experience and Activist. Therefore, experience does not impact on Activist.

### Pragmatist

$H_0: \mu_i = \mu_j; i = j; 1, 2, 3$ ; there is no significant difference between experience and Pragmatist.

$H_1$ : at least one mean group is different from the others.

It was found that the results of ANOVA showed that P-Value is equal to 0.496 which is greater than 0.05; therefore, the null hypothesis is accepted. There is no significant difference between mean groups of experience and Pragmatist. Therefore, experience does not impact on Pragmatist.

## Reflector

$H_0: \mu_i = \mu_j, i = j; 1, 2, 3$ ; there is no significant difference between experience and Reflector.

$H_1$ : at least one mean group is different from the others.

It was found that the results of ANOVA showed that P-Value is equal to 0.469 which is greater than 0.05; therefore, the null hypothesis is accepted. There is no significant difference between mean groups of experience and Reflector. Therefore, experience does not impact on Reflector.

## Theorist

$H_0: \mu_i = \mu_j; i = j; 1, 2, 3$ ; there is no significant difference between experience and Reflector.

$H_1$ : at least one mean group is different from the others.

It was found that P-Value is equal to 0.164 which is greater than 0.05 therefore, the null hypothesis is accepted. Hence, there is no significant difference between mean groups of experience and Theorist.

## Summary

In summary, it was found that there is no relationship between experience and any of the four learning styles.

## **Hypothesis B: Impact of the Number of Employees and Demographics of Respondents on Leadership Styles**

### **Number of Employees and Leadership Styles**

#### Transformational Leadership

H<sub>0</sub>:  $\sigma^2_{\text{Small firm}} = \sigma^2_{\text{Large firm}}$ , there is no significant difference between the variance of small and large firms.

H<sub>1</sub>:  $\sigma^2_{\text{Small firm}} \neq \sigma^2_{\text{Large firm}}$ , there is significant difference between the variance of small and large firms.

Levene's Test for Equality of Variances indicates P-Value = 0.644 which is greater than 0.05. Therefore, the null hypothesis is accepted. This proposes that there is no significant difference between the variance of small and large firms. As a result, the hypothesis will be tested by Equal Variance Assumed method.

H<sub>0</sub>: There is no significant difference between number of employees and Transformational Leadership.

H<sub>1</sub>: There is significant difference between number of employees and Transformational Leadership.

Independent Samples T-Test shows that P- Value = 0.908 which is lower than 0.05; therefore, the null hypothesis is accepted; there is no significant difference between number of employees and Transformational Leadership. Hence, it can be concluded that number of employees does not impact Transformational Leadership.

## Transactional Leadership

H<sub>0</sub>:  $\sigma^2_{\text{Small firm}} = \sigma^2_{\text{Large firm}}$ , there is no significant difference between the variance of small and large firms.

H<sub>1</sub>:  $\sigma^2_{\text{Small firm}} \neq \sigma^2_{\text{Large firm}}$ , there is significant difference between the variance of small and large firms.

Levene's Test for Equality of Variances indicates P-Value = 0.318 which is greater than 0.05. Therefore, the null hypothesis is accepted. This proposes that there is no significant difference between the variance of small and large firms.

As a result, the hypothesis will be tested by Equal Variance Assumed method.

H<sub>0</sub>: There is no significant difference between number of employees and Transactional Leadership.

H<sub>1</sub>: There is significant difference between number of employees and Transactional Leadership.

Independent Samples T-Test shows that P-Value = 0.696 which is greater than 0.05. Therefore, the null hypothesis is accepted; there is no significant difference between number of employees and Transactional Leadership. Hence, it can be concluded that number of employees does not impact Transactional Leadership.

## Laissez-faire Leadership

$H_0: \sigma^2_{\text{Small firm}} = \sigma^2_{\text{Large firm}}$ , there is no significant difference between the variance of small and large firms.

$H_1: \sigma^2_{\text{Small firm}} \neq \sigma^2_{\text{Large firm}}$ , there is significant difference between the variance of small and large firms.

Levene's Test for Equality of Variances indicates P-Value = 0.74 which is greater than 0.05. Therefore, the null hypothesis is accepted. This proposes that there is no significant difference between the variance of small and large firms.

As a result, the hypothesis will be tested by Equal Variance Assumed method.

$H_0$ : There is no significant difference between number of employees and Laissez-faire Leadership.

$H_1$ : There is significant difference between number of employees and Laissez-faire Leadership.

Independent Samples T-Test shows that P-Value = 0.244 which is greater than 0.05. Therefore, the null hypothesis is accepted; there is no significant difference between number of employees and Laissez-faire Leadership. Hence, it can be concluded that number of employees does not impact Laissez-faire Leadership.

## Summary

In summary, it was found that there is no relationship between number of employees and any of the three leadership styles.

## Gender and Leadership Styles

### Transformational Leadership

$H_0: \sigma^2_{\text{Male manager}} = \sigma^2_{\text{Female manager}}$ , there is no significant difference between the variance of male and female managers.

$H_1: \sigma^2_{\text{Male manager}} \neq \sigma^2_{\text{Female manager}}$ , there is significant difference between the variance of male and female managers.

Levene's Test for Equality of Variances indicates that P-Value = 0.704 which is greater than 0.05. The null hypothesis is accepted. As a result, the hypothesis will be tested by Equal Variance Assumed method.

$H_0$ : There is no significant difference between gender and Transformational Leadership.

$H_1$ : There is significant difference between gender and Transformational Leadership.

Independent Samples T-Test shows that P-Value = 0.283 which is greater than 0.05; therefore,  $H_0$  is accepted. This suggests that there is no significant difference between gender and Transformational Leadership. Hence, it can be concluded that gender does not impact Transformational Leadership.

## Transactional Leadership

$H_0: \sigma^2_{\text{Male managers}} = \sigma^2_{\text{Female managers}}$ , there is no significant difference between the variance of male and female managers.

$H_1: \sigma^2_{\text{Male managers}} \neq \sigma^2_{\text{Female managers}}$ , there is significant difference between the variance of male and female managers.

Levene's Test for Equality of Variances indicates that P-Value = 0.752 which is greater than 0.05. The null hypothesis is accepted. As a result, the hypothesis will be tested by Equal Variance Assumed method.

$H_0$ : There is no significant difference between gender and Transactional Leadership.

$H_1$ : There is significant difference between gender and Transactional Leadership.

Independent Samples T-Test shows that P-Value = 0.102 is greater than 0.05; therefore, the null hypothesis is accepted. This suggests that there is no significant difference between gender and Transactional Leadership. Hence, it can be concluded that gender does not impact Transactional Leadership.

## Laissez-faire Leadership style

H<sub>0</sub>:  $\sigma^2_{\text{Male managers}} = \sigma^2_{\text{Female managers}}$ , there is no significant difference between the variance of male and female managers.

H<sub>1</sub>:  $\sigma^2_{\text{Male managers}} \neq \sigma^2_{\text{Female managers}}$ , there is significant difference between the variance of male and female managers.

Levene's Test for Equality of Variances indicates that P-Value = 0.955 which is greater than 0.05. The null hypothesis is accepted. This suggests that there is no significant difference between the variance of male and female managers. As a result, the hypothesis will be tested by Equal Variance Assumed method.

H<sub>0</sub>: There is no significant difference between gender and Laissez-faire Leadership.

H<sub>1</sub>: There is significant difference between gender and Laissez-faire Leadership.

Independent Samples T-Test shows that P-Value = 0.176 which is greater than 0.05; therefore, H<sub>0</sub> is accepted. This suggests that there is no significant difference between gender and Laissez-faire Leadership. Hence, it can be concluded that gender does not impact Laissez-faire Leadership.

## Summary

In summary, it was found that there is no relationship between gender and any of the three leadership styles.

## **Age and Leadership Styles**

### Transformational Leadership

H<sub>0</sub>:  $\mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean of age groups and Transformational Leadership.

H<sub>1</sub>: At least one mean group is different from the others

It was found that the results of ANOVA suggest that P-Value = 0.361 which is greater than 0.05, therefore the null hypothesis is accepted. There is no significant difference among mean of age groups and Transformational Leadership. Hence, it can be concluded that age ranges do not impact on Transformational Leadership.

### Transactional Leadership

H<sub>0</sub>:  $\mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean of age groups and Transactional Leadership.

H<sub>1</sub>: At least one mean group is different from the others.

It was found that the results of ANOVA suggest that P-Value = 0.206 which is greater than 0.05. Therefore, the null hypothesis is accepted. There is no significant difference between mean group of age and Transactional Leadership. Thus, it can be concluded that age ranges do not impact on Transactional Leadership.

### Laissez-faire Leadership

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean of age groups and Laissez-faire Leadership.

$H_1$ : At least one mean group is different from the others.

It was found that the results of ANOVA suggest that P-Value is equal to 0.990 which is greater than 0.05. Therefore, the null hypothesis is accepted. There is no significant difference among mean of age groups and Laissez-faire Leadership.

Therefore, it can be concluded that age ranges do not impact on Laissez-faire Leadership.

### Summary

In summary, it was found that there is no relationship between age and any of the three leadership styles.

## **Education and Leadership Styles**

### Transformational Leadership

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean groups of education and Transformational Leadership.

$H_1$ : At least one mean group is different from the others.

Where:

$\mu_1$  = Elementary School

$\mu_2$  = Junior High School

$\mu_3$  = Senior High School/ Vocational School

$\mu_4$  = College Diploma/ Higher Vocational School

$\mu_5$  = Bachelor's Degree

$\mu_6$  = Master's Degree

It was found that the results of ANOVA indicates that P-Value is equal to 0.06 which is lower than 0.05. Therefore, the null hypothesis is rejected. There is significant difference between mean groups of education and Transformational Leadership.

$H_0: \sigma^2_i = \sigma^2_j; i, j = 1, 2, 3, 4, 5, 6;$  there is no significant difference among variances of education groups.

$H_1:$  At least one variance of education groups is different from the others.

Where:

$\sigma_1$  = Elementary School

$\sigma_2$  = Junior High School

$\sigma_3$  = Senior High School/ Vocational School

$\sigma_4$  = College Diploma/ Higher Vocational School

$\sigma_5$  = Bachelor's Degree

$\sigma_6$  = Master's Degree

It was found that the results of the Homogeneity of Variances test suggest that P-Value is equal to 0.059 which is greater than 0.05. Therefore, the null hypothesis

is accepted; there is no significant difference among variances of educational groups. Thus, the Tukey HSD test is used to verify the mean difference.

**Appendix I: Table 43. Multiple Comparisons: Dependent Variable: Transformational Leadership**

| (I) Education                             | (J) Education                             | Mean Difference | Sig   |
|---|---|-----------------|-------|
| Elementary School                         | Junior High School                        | -1.225          | 0.395 |
|   | Senior High School/ Vocational School     | -2.025(*)       | 0.007 |
|   | College Diploma/ higher Vocational School | -0.683          | 0.841 |
|   | Bachelor's degree                         | 0.109           | 1.000 |
|   | Master's degree                           | 0.309           | 1.000 |
| Junior High School                        | Elementary School                         | 1.225           | 0.395 |
|   | Senior High School/ Vocational School     | -0.799          | 0.814 |
|   | College Diploma/ higher Vocational School | 0.542           | 0.960 |
|   | Bachelor's degree                         | 1.334           | 0.529 |
|   | Master's degree                           | 1.534           | 0.831 |
| Senior High School/ Vocational School     | Elementary School                         | 2.025(*)        | 0.007 |
|   | Junior High School                        | 0.799           | 0.814 |
|   | College Diploma/ higher Vocational School | 1.341           | 0.194 |
|   | Bachelor's degree                         | 2.133(*)        | 0.044 |
|   | Master's degree                           | 2.333           | 0.413 |
| College Diploma/ higher Vocational School | Elementary School                         | 0.683           | 0.841 |
|   | Junior High School                        | -0.542          | 0.960 |
|   | Senior High School/ Vocational School     | -1.341          | 0.194 |
|   | Bachelor's degree                         | 0.792           | 0.886 |
|   | Master's degree                           | 0.992           | 0.967 |
| Bachelor's degree                         | Elementary School                         | -0.109          | 1.000 |
|   | Junior High School                        | -1.334          | 0.529 |
|   | Senior High School/ Vocational School     | -2.133(*)       | 0.044 |
|   | College Diploma/ higher Vocational School | -0.792          | 0.886 |
|   | Master's degree                           | 0.200           | 1.000 |
| Master's degree                           | Elementary School                         | -0.309          | 1.000 |
|   | Junior High School                        | -1.534          | 0.831 |
|   | Senior High School/ Vocational School     | -2.333          | 0.413 |
|   | College Diploma/ higher Vocational School | -0.992          | 0.967 |
|   | Bachelor's degree                         | -0.200          | 1.000 |

\* The mean difference is significant at .05 level.

Table 43 above reports that the mean difference between group 1 Elementary School and group 3 Senior High School/Vocational School is -2.025 and the mean difference between group 5 Bachelor and group 3 Senior High School/Vocational School is -2.133. Hence, the manager who had completed

Senior High School or Vocational School, tends to be more related to Transformational Leadership than others. Therefore, it can be concluded that levels of education attained is likely to have an impact on Transformational Leadership.

#### Transactional Leadership

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean groups of education and Transactional Leadership.

$H_1$ : At least one mean group is different from the others.

The results of ANOVA indicates that P-Value is equal to 0.979 which is greater than 0.05. Therefore, the null hypothesis is accepted. This means that there is no significant difference between mean groups of education and Transactional Leadership. Therefore, it can be concluded that levels of education do not impact on Transactional Leadership.

#### Laissez-faire Leadership

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean groups of education and Laissez-faire Leadership.

$H_1$ : At least one mean group is different from the others.

The results of ANOVA explain that P-Value is equal to 0.275 which is greater than 0.05. Therefore, the null hypothesis is accepted. This means that there is no significant difference between mean groups of education and Laissez-faire

Leadership. Therefore, it can be concluded that levels of education do not impact on Laissez-faire Leadership.

## Summary

**Appendix I: Table 44. Relationship between Education and Leadership Styles**

| Variable “X” | Variable “Y”                | Relationship   |
|--------------|-----------------------------|--|
| Education    | Transformational Leadership | Significantly related; positive correlation with group 3 (Senior High School/ Vocational School) |
|              | Transactional Leadership    | No relationship  |
|              | Laissez-faire Leadership    | No relationship  |

Table 44 indicates a significant relationship between levels of education and Transformational Leadership. The manager who had completed Senior High School or Vocational School is more likely to exhibit Transformational Leadership than the other groups. However, there is no relationship between levels of education and either Transactional Leadership or Laissez-faire Leadership.

## Experience and Leadership Styles

### Transformational Leadership

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean groups of experience and Laissez-faire Leadership.

$H_1$ : At least one mean group is different from the others.

Where:

Group 1= 6 years and less (Short)

Group 2 = More than 6 years but less than 16 (Medium)

Group 3 = 16 years and above (Long)

The results of ANOVA suggest that P-Value = 0.027 which is greater than 0.05.

Therefore, the null hypothesis is rejected. This means that there is significant difference between mean groups of experience and Transformational Leadership.

$H_0: \sigma^2_i = \sigma^2_j; i, j = 1, 2, 3$ ; there is no significant difference among variances of experience groups.

$H_1$ : At least one variance of experience groups is different from the others.

Where:

$\sigma_1$  = 6 years and less (Short)

$\sigma_2$  = More than 6 years but less than 16 (Medium)

$\sigma_3$  = 16 years and above (Long)

The results of the Homogeneity of Variances test suggest that P-Value is equal to 0.006 which is lower than 0.05. Therefore, the null hypothesis is rejected; there is significant difference among variances of experience groups. Thus, the Dunnett's test is used to verify the mean difference.

**Appendix I: Table 45. Multiple Comparisons: Dependent Variable: Transformational Leadership**

| (i) Experience | (j) Experience | Mean Difference (I-J) | Sig.  |
|----------------|----------------|-----------------------|-------|
| Short          | Medium         | -1.316(*)             | 0.049 |
|                | Long           | -0.397                | 0.741 |
| Medium         | Short          | 1.316(*)              | 0.049 |
|                | Long           | 0.919                 | 0.214 |
| Long           | Short          | 0.397                 | 0.741 |
|                | Medium         | -0.919                | 0.214 |

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

Table 45 above reports that the mean difference between group 2 (Medium) and group 1 (Short) is 1.316. This suggests that the manager whose work experience is more than 6 years but less than 16 years is more likely to exhibit Transformational Leadership than the manager whose work experience is 6 years and less. Therefore, it can be concluded that experience impacts on Transformational Leadership.

#### Transactional Leadership

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean groups of experience and Laissez-faire Leadership.

$H_1$ : At least one mean group is different from the others

The results of ANOVA suggest that P-Value is equal to 0.315 which is greater than 0.05. Therefore, the null hypothesis is accepted. This means that there is no significant difference between mean groups of experience lengths and Transactional Leadership. Therefore, it can be concluded that experience lengths do not impact on Transactional Leadership.

#### Laissez-faire Leadership

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean groups of experience and Laissez-faire Leadership.

$H_1$ : At least one mean group is different from the others

The results of ANOVA suggest that P-Value is equal to 0.737 which is greater than 0.05. Therefore, the null hypothesis is accepted. This means that there is no significant difference between mean groups of experience and Laissez-faire Leadership. Therefore, it can be concluded that experience lengths do not impact on Laissez-faire Leadership.

### Summary

**Appendix I: Table 46. Relationship between Experience and Leadership Styles**

| Variable "X" | Variable "Y"                | Relationship  |
|--------------|-----------------------------|---|
| Experience   | Transformational Leadership | Significantly related; positive correlation with group 2 (medium) |
|              | Transactional Leadership    | No relationship   |
|              | Laissez-faire Leadership    | No relationship   |

Table 46 above reports a significant relationship between experience and Transformational Leadership. This suggests that the managers whose work experience is more than 6 years but less than 16 years are more likely to exhibit Transformational Leadership than the other groups. However, we find no relationship between experience and either Transactional Leadership or Laissez-faire Leadership.

## **Hypothesis C: Impact of the Number of Employees and Demographics of Respondents on Organisational Effectiveness**

### **Number of Employees, Demographics of Respondents and Organisational Effectiveness**

Number of Employees and Organisational Effectiveness

H<sub>0</sub>:  $\sigma^2_{\text{Small Firm}} = \sigma^2_{\text{Large Firm}}$ , there is no significant difference between the variance of small and large firm.

H<sub>1</sub>:  $\sigma^2_{\text{Small Firm}} \neq \sigma^2_{\text{Large Firm}}$ , there is significant difference between the variance of small and large firm.

Levene's Test for Equality of Variances indicates that P-Value = 0.278 which is greater than 0.05. Hence, the null hypothesis is accepted. This suggests that there is no significant difference between the variance of small and large firms. As a result, the hypothesis will be tested by Equal Variance Assumed method.

H<sub>0</sub>: There is no significant difference between number of employees and organisational effectiveness.

H<sub>1</sub>: There is significant difference between number of employees and organisational effectiveness.

Independent Samples T-Test shows that P-Value = 0.000 which is lower than 0.05. Therefore, the null hypothesis is accepted, there is significant difference between number of employees and organisational effectiveness. In addition, the mean difference between the small and the large firms is -6.81. This suggests that the large firm is more likely to be related to the organisational effectiveness than

the small firm. Hence, it can be concluded that number of employees has an impact on organisational effectiveness.

#### Gender and Organisational Effectiveness

$H_0: \sigma^2_{\text{Male managers}} = \sigma^2_{\text{Female managers}}$ , there is no significant difference between the variance of male and female managers.

$H_1: \sigma^2_{\text{Male managers}} \neq \sigma^2_{\text{Female managers}}$ , there is significant difference between the variance of male and female managers.

Levene's Test for Equality of Variances indicates that P-Value = 0.785 which is greater than 0.05. Hence, the null hypothesis is accepted. This suggests that there is no significant difference between the variance of male and female managers.

As a result, the hypothesis will be tested by Equal Variance Assumed method.

$H_0$ : There is no significant difference between gender and organisational effectiveness.

$H_1$ : There is significant difference between gender and organisational effectiveness.

Independent Samples T-Test shows that P-Value = 0.136 which is greater than 0.05. Therefore, the null hypothesis is accepted, there is no significant difference between gender and organisational effectiveness. Hence, it can be concluded that gender does not impact on Organisational Effectiveness.

### Age and Organisational Effectiveness

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean of age groups and Organisational Effectiveness.

$H_1$ : At least one mean group is different from the others.

The results of ANOVA suggest that P-Value is equal to 0.562 which is greater than 0.05. Therefore, the null hypothesis is accepted. This means that there is no significant difference among mean group of age and organisational effectiveness.

### Education and Organisational Effectiveness

$H_0: \mu_i = \mu_j, i = j; 1, 2, 3, 4, 5, 6$ ; there is no significant difference among mean group of levels of education and organisational effectiveness.

$H_1$ : At least one mean group is different from the others.

The results of ANOVA suggest that P-Value is equal to 0.002 which is lower than 0.05. Therefore, the null hypothesis is rejected. This means that there is significant difference among mean group of levels of education and organisational effectiveness. In addition, the Test of Homogeneity of Variances is tested to verify the method of testing the mean difference.

$H_0: \sigma^2_1 = \sigma^2_2 = \sigma^2_3 = \sigma^2_4 = \sigma^2_5 = \sigma^2_6$ , there is no significant difference among variances of different educational groups.

$H_1$ : At least one group of variances is different from the others.

The results of the Homogeneity of Variances test suggest that P-Value is equal to 0.587 which is greater than 0.05 therefore, the null hypothesis is accepted. Therefore, there is no significant difference among variances of educational groups. Thus, the Tukey HSD test is used to verify the mean difference.

**Appendix I: Table 47. Multiple Comparisons: Organisational Effectiveness**

| (I) Education                             | (J) Education                             | Mean Difference | Sig   |
|---|---|-----------------|-------|
| Elementary School                         | Junior High School                        | -5.30           | 0.204 |
|   | Senior High School/ Vocational School     | -7.67(*)        | 0.004 |
|   | College Diploma/ higher Vocational School | -4.90           | 0.179 |
|   | Bachelor's degree                         | 0.37            | 1.000 |
|   | Master's degree                           | 1.72            | 0.999 |
| Junior High School                        | Elementary School                         | 5.30            | 0.204 |
|   | Senior High School/ Vocational School     | -2.36           | 0.912 |
|   | College Diploma/ higher Vocational School | 0.40            | 1.000 |
|   | Bachelor's degree                         | 5.67            | 0.345 |
|   | Master's degree                           | 7.02            | 0.646 |
| Senior High School/ Vocational School     | Elementary School                         | 7.67(*)         | 0.004 |
|   | Junior High School                        | 2.36            | 0.912 |
|   | College Diploma/ higher Vocational School | 2.76            | 0.775 |
|   | Bachelor's degree                         | 8.04(*)         | 0.032 |
|   | Master's degree                           | 9.39            | 0.294 |
| College Diploma/ higher Vocational School | Elementary School                         | 4.90            | 0.179 |
|   | Junior High School                        | -0.40           | 1.000 |
|   | Senior High School/ Vocational School     | -2.76           | 0.775 |
|   | Bachelor's degree                         | 5.28            | 0.350 |
|   | Master's degree                           | 6.63            | 0.678 |
| Bachelor's degree                         | Elementary School                         | -0.37           | 1.000 |
|   | Junior High School                        | -5.67           | 0.345 |
|   | Senior High School/ Vocational School     | -8.04(*)        | 0.032 |
|   | College Diploma/ higher Vocational School | -5.28           | 0.350 |
|   | Master's degree                           | 1.35            | 1.000 |
| Master's degree                           | Elementary School                         | -1.72           | 0.999 |
|   | Junior High School                        | -7.02           | 0.646 |
|   | Senior High School/ Vocational School     | -9.39           | 0.294 |
|   | College Diploma/ higher Vocational School | -6.63           | 0.678 |
|   | Bachelor's degree                         | -1.35           | 1.000 |

\*The mean difference is significant at .05 level.

Table 47 reports the mean difference between Senior High School/ Vocational School and Elementary School is 7.67 whereas for Senior High School/ Vocational School and Bachelor's Degree, it is 8.04. This suggests that the group of managers who completed Senior High School/ Vocational School is more likely to exhibit organisational effectiveness than the other groups. Hence, it can be concluded that levels of education may have a significant impact on organisational effectiveness.

#### Experience and Organisational Effectiveness

$H_0: \mu_1 = \mu_2 = \mu_3$ ; there is no significant difference among mean group of experience and organisational effectiveness.

$H_1$ : At least one mean group is different from the others.

The results of ANOVA suggest that P-Value = 0.014 which is lower than 0.05. Therefore, the null hypothesis is rejected. This means that there is significant difference among mean group of experience and organisational effectiveness. In addition, the Test of Homogeneity of Variances is tested to verify the method of testing the mean difference.

$H_0: \sigma^2_1 = \sigma^2_2 = \sigma^2_3$ , there is no significant difference among variances of different experience groups.

$H_1$ : At least one group of variances is different from the others.

The results of the Homogeneity of Variances test suggest that P-Value = 0.003 which is lower than 0.05 therefore, the null hypothesis is rejected. Therefore,

there is a significant difference among variances of experience groups. Thus, the Dunnett's test is used to verify the mean difference.

**Appendix I: Table 48. Multiple Comparisons: Organisational Effectiveness**

| (I) Experience | (J) Experience | Mean Difference (I-J) | Sig.  |
|----------------|----------------|-----------------------|-------|
| Short          | Medium         | -5.28(*)              | 0.028 |
|                | Long           | -1.84                 | 0.614 |
| Medium         | Short          | 5.28(*)               | 0.028 |
|                | Long           | 3.44                  | 0.132 |
| Long           | Short          | 1.84                  | 0.614 |
|                | Medium         | -3.44                 | 0.132 |

Table 48 above reports that the mean difference between the groups of experience lengths, medium and short is 5.28. This suggests that the manager whose experience length is more than 6 years but less than 16 years is more likely to be related to organisational effectiveness than the manager whose experience length is 6 years and less. Hence, it can be concluded that experience lengths have an impact on organisational effectiveness.

### Summary

**Appendix I: Table 49. Relationship between Number of Employees, Demographics of Respondents and Organisational Effectiveness**

| Demographics of Respondents | Relationship to Organisational Effectiveness   |
|-----------------------------|--|
| Number of Employees         | Significantly related, positive correlation with large firm  |
| Gender                      | No relationship  |
| Age                         | No relationship  |
| Education                   | Significantly related, positive correlation with the manager who completed Senior High School/ Vocational School |
| Experience                  | Significantly related to experience of more than 6 years but less than 16 years                                  |

Table 49 above reports a significant relationship between number of employees and Organisational Effectiveness. The large firm is more likely to be related to

Organisational Effectiveness than the small firm. In comparison, there is no relationship between gender or age and Organisational Effectiveness. Nonetheless, there is a significant relationship between levels of education and Organisational Effectiveness. The manager who had completed Senior High School/Vocational School tends to be more related to Organisational Effectiveness than the other groups. Finally, there is a significant relationship between experience and Organisational Effectiveness. The manager whose work experience is more than 6 years but less than 16 years is more likely to be related to organisational effectiveness than the other groups.

### **Correlation Coefficient**

To assess the predictive value of the regression line, a measure of strength of the relationship among variables is necessary. In this section, Pearson's product-moment correlation coefficient is applied to study the relationship among the variables, number of employees, demographics of respondents, learning styles, leadership styles and the organisation's effectiveness. A correlation analysis is appropriate to describe the strength and direction of the relationship (Punch, 1998). From the Central Limit Theorem, if the sample size is sufficiently large ( $n$  is equal to or larger than 30), the sampling distribution of means will be normally distributed (Grimm, 1993). Hence it could be supposed that the sampling distribution of means in this study is normally distributed as the sample size is 140. Pearson's product moment correlation, or  $r$ , determines the strength between two ranked or quantifiable variables, i.e. the extent to which values of the two

variables are “proportional” to each other (Saunders et al., 2002). The following guidelines can be employed to determine the strength of the relationship:

**Appendix I: Table 50. The level of relationship**

| Correlation | Negative               | Positive             |
|-------------|------------------------|----------------------|
| Small       | $r = -0.10$ to $-0.29$ | $r = 0.10$ to $0.29$ |
| Medium      | $r = -0.30$ to $-0.49$ | $r = 0.30$ to $0.49$ |
| Large       | $r = -0.50$ to $-1.00$ | $r = 0.50$ to $1.00$ |

Pearson’s correlation is a measure of the linear association between two interval or ratio variables and varies between -1 and +1 (Pallant, 2001). Pearson’s correlation is the ratio of the variance shared by two variables compared to overall variance of two variables (Cohen et al., 2003). If the shared variance is high, this variance will be similar to the overall variance and so the correlation will come close to -1 or +1. If there is no shared variance, the correlation will be zero. Variance is based on the extent to which scores differ from the mean. If high scores on one variable are associated with high scores on the other variable, the difference will be in the same direction. A positive difference in one variable will tend to go together with a positive difference in the other. Correspondingly, a negative difference in one variable will tend to be associated with a negative difference in the other. As a result, the larger the covariance is, the stronger the relationship.

According to Hair et al. (2006), the interval scales and ratio scales provide the highest level of measurement precision, permitting nearly any mathematical operation to be performed. Ratio scales represent the highest form of measurement precision because they possess the advantages of all lower scales plus an absolute zero point. Any mathematical operation is permissible with

ratio-scale measurement. In this study, Organisational Effectiveness has been measured using a ratio scale, so it can be supposed that it provides the highest level of precision.

### **Hypothesis D: There is a Significant Relationship between Number of Employees, Demographics of Respondents and Learning Styles**

In this section, the relationship between number of employees, demographics of respondents and learning styles were tested. Pearson's Correlation Coefficient is used to suggest whether number of employees and respondents' profiles influence different learning styles. If the P-value is greater than 0.05, the null hypothesis is accepted, implying no significant correlation between variables. On the other hand, if the P-value is lower than 0.05, the null hypothesis is rejected, suggesting that there is a significant correlation between the variables.

### **Number of Employees and Learning Styles**

Number of Employees and Activist

H<sub>0</sub>: There is no significant correlation between number of employees and Activist.

**Appendix I: Table 51. Correlations**

| Variables           |                     | Activist |
|---------------------|---------------------|----------|
| Number of Employees | Pearson Correlation | -0.217   |
|                     | Sig. (2-tailed)     | 0.010    |

Table 51 above, Pearson's correlation coefficient indicates ( $r = -0.217$ ) a significant correlation between number of employees and Activist (two-tailed significance of 0.010). So, the null hypothesis is rejected. This means that there is a low level of negative correlation between variables. In addition,  $R^2$  is equal to 0.047, meaning that approximately 4.7 per cent of the total variance of Activist can be explained by the total variance of number of employees.

#### Number of Employees and Pragmatist

$H_0$ : There is no significant correlation between number of employees and Pragmatist.

Pearson's correlation coefficient ( $r = 0.344^{**}$ ) indicates significant correlation between number of employees and Pragmatist (two-tailed significance of 0.000 at the 0.01 significant level). So, the null hypothesis is rejected. This means that there is a medium level of positive correlation between variables. In addition,  $R^2$  is equal to 0.118. This means that approximately 11.8 per cent of the total variance of Pragmatist can be explained by the total variance of number of employees.

#### Number of Employees and Reflector

$H_0$ : There is no significant correlation between number of employees and Reflector.

Pearson's correlation coefficient ( $r = 0.159$ ) indicates no significant correlation between number of employees and Reflector (two-tailed significance of 0.061). So, the null hypothesis is accepted.

Number of Employees and Theorist

$H_0$ : There is no significant correlation between number of employees and Theorist

Pearson's correlation coefficient ( $r = -0.128$ ) indicates no significant correlation between number of employees and Theorist (two-tailed significance of 0.132). So, the null hypothesis is accepted.

## **Age and Learning Styles**

### Age and Activist

H<sub>0</sub>: There is no significant correlation between age and Activist.

The Pearson's correlation coefficient ( $r = -0.079$ ) indicates no significant correlation between age and Activist (two-tailed significance of 0.354). So, the null hypothesis is accepted.

### Age and Pragmatist

H<sub>0</sub>: There is no significant correlation between age and Pragmatist.

Pearson's correlation coefficient ( $r = 0.045$ ) indicates no significant correlation between age and Pragmatist (two-tailed significant of 0.596). Therefore, the null hypothesis is accepted.

### Age and Reflector

H<sub>0</sub>: There is no significant correlation between age and Reflector.

Pearson's correlation coefficient ( $r = 0.137$ ) indicates no significant correlation between Age and Reflector (two-tailed significance of 0.106). Therefore, the null hypothesis is accepted.

## Age and Theorist

H<sub>0</sub>: There is no significant correlation between age and Theorist.

Pearson's correlation coefficient ( $r = 0.294^{**}$ ) indicates significant correlation between age and Theorist (two-tailed significance of 0.000 at the 0.01 significant level). Therefore, the null hypothesis is rejected. This means that there is a low level of positive correlation between variables. Besides,  $R^2$  is equal to 0.086. This means that approximately 8.6 percent of the total variance of Theorist can be explained by the total variance of Age.

## Education and Learning Styles

### Education and Activist

H<sub>0</sub>: There is no significant correlation between education and Activist.

Pearson's correlation coefficient ( $r = -0.018$ ) indicates no significant correlation between education and Activist (two-tailed significance of 0.829). So, the null hypothesis is accepted.

### Education and Pragmatist

H<sub>0</sub>: There is no significant correlation between education and Pragmatist.

Pearson's correlation coefficient ( $r = 0.086$ ) indicates no significant correlation between education and Pragmatist (two-tailed significance of 0.313). So, the null hypothesis is accepted.

### Education and Reflector

H<sub>0</sub>: There is no significant correlation between education and Reflector.

Pearson's correlation coefficient ( $r = -0.016$ ) indicates no significant correlation between education and Reflector (two-tailed significance of 0.847). So, the null hypothesis is accepted.

### Education and Theorist

H<sub>0</sub>: There is no significant correlation between education and Theorist.

Pearson's correlation coefficient ( $r = -0.100$ ) indicates no significant correlation between education and Theorist (two-tailed significance of 0.239). So, the null hypothesis is accepted.

## **Experience and Learning Styles**

### Experience and Activist

H<sub>0</sub>: There is no significant correlation between experience and Activist.

Pearson's correlation coefficient ( $r = -0.080$ ) indicates no significant correlation between experience and Activist (two-tailed significance of 0.345). Hence, the null hypothesis is accepted.

### Experience and Pragmatist

H<sub>0</sub>: There is no significant correlation between experience and Pragmatist.

Pearson's correlation coefficient ( $r = 0.058$ ) indicates no significant correlation between experience and Pragmatist (two-tailed significance of 0.498). So, the null hypothesis is accepted.

### Experience and Reflector

H<sub>0</sub>: There is no significant correlation between experience and Reflector.

Pearson's correlation coefficient ( $r = 0.148$ ) indicates no significant correlation between experience and Reflector (two-tailed significance of 0.081). So, the null hypothesis is accepted.

## Experience and Theorist

H<sub>0</sub>: There is no significant correlation between experience and Theorist.

Pearson's correlation coefficient ( $r = 0.266^{**}$ ) indicates significant correlation between experience and Theorist (two-tailed significance of 0.001 at the 0.01 significant level). So, the null hypothesis is rejected. This means that there is a low level of positive correlation between variables. In addition,  $R^2$  is equal to 0.07. This means that approximately 7 percent of the total variance of Theorist can be explained by the total variance of experience.

## Summary

**Appendix I: Table 52. Relationship between Number of Employees, Demographics of Respondents and Learning Styles**

| Demographics os Respondents | Learning Styles | Relationship                |
|-----------------------------|-----------------|-----------------------------|
| Number of Employees         | Activist        | Weak negative correlation   |
|                             | Pragmatist      | Medium positive correlation |
|                             | Reflector       | -                           |
|                             | Theorist        | -                           |
| Age                         | Activist        | -                           |
|                             | Pragmatist      | -                           |
|                             | Reflector       | -                           |
|                             | Theorist        | Weak positive correlation   |
| Education                   | Activist        | -                           |
|                             | Pragmatist      | -                           |
|                             | Reflector       | -                           |
|                             | Theorist        | -                           |
| Experience                  | Activist        | -                           |
|                             | Pragmatist      | -                           |
|                             | Reflector       | -                           |
|                             | Theorist        | Weak positive correlation   |

Table 52 above reports a weak negative correlation between number of employees and Activist, and a medium positive correlation between number of

employees and Pragmatist. However, it was found that there was no correlation between number of employees and either Reflector or Theorist. Furthermore, there was no correlation between age and Activist, Pragmatist or Reflector. In contrast, it was observed that there was a weak positive correlation between age and Theorist. Additionally, there was no correlation between education and learning styles. Finally, there is no correlation between experience and Activist, Pragmatist or Reflector, but it was found that there was a weak positive correlation between experience and Theorist.

### **Hypothesis E: There is a Significant Relationship between Number of Employees, Demographics of Respondents and Leadership Styles**

#### **Number of Employees and Leadership Styles**

##### Number of Employees and Transformational Leadership

H<sub>0</sub>: There is no significant correlation between number of employees and Transformational Leadership

Pearson's correlation coefficient ( $r = 0.388$ ) indicates significant correlation between number of employees and Transformational Leadership (two-tailed significance of 0.000 at the 0.01 significant level). So, the null hypothesis is rejected. This means that there is a medium level of positive correlation between variables. In addition,  $R^2$  is equal to 0.150. This means that approximately 15

percent of the total variance of Transformational Leadership can be explained by the total variance of number of employees.

#### Number of Employees and Transactional Leadership

H<sub>0</sub>: There is no significant correlation between number of employees and Transactional Leadership

Pearson's correlation coefficient ( $r = -0.003$ ) indicates no significant correlation between number of employees and Transactional Leadership (two-tailed significance of 0.972). So, the null hypothesis is accepted.

#### Number of Employees and Laissez-faire Leadership

H<sub>0</sub>: There is no significant correlation between number of employees and Laissez-faire Leadership

Pearson's correlation coefficient ( $r = -0.103$ ) indicates no significant correlation between number of employees and Laissez-faire Leadership (two-tailed significance of 0.226). So, the null hypothesis is accepted.

## **Age and Leadership Styles**

### Age and Transformational Leadership

H<sub>0</sub>: There is no significant correlation between age and Transformational Leadership

Pearson's correlation coefficient ( $r = -0.011$ ) indicates no significant correlation between age and Transformational Leadership (two-tailed significance of 0.896). So, the null hypothesis is accepted.

### Age and Transactional Leadership

H<sub>0</sub>: There is no significant correlation between age and Transactional Leadership

Pearson's correlation coefficient ( $r = -0.145$ ) indicates no significant correlation between age and Transactional Leadership (two-tailed significance of 0.088). So, the null hypothesis is accepted.

### Age and Laissez-faire Leadership

H<sub>0</sub>: There is no significant correlation between age and Laissez-faire Leadership

Pearson's correlation coefficient ( $r = 0.025$ ) indicates no significant correlation between age and Laissez-faire Leadership (two-tailed significance of 0.766). So, the null hypothesis is accepted.

## **Education and Leadership Styles**

### Education and Transformational Leadership

H<sub>0</sub>: There is no significant correlation between education and Transformational Leadership

Pearson's correlation coefficient ( $r = 0.039$ ) indicates no significant correlation between education and Transformational Leadership (two-tailed significance of 0.652). So, the null hypothesis is accepted.

### Education and Transactional Leadership

H<sub>0</sub>: There is no significant correlation between education and Transactional Leadership

Pearson's correlation coefficient ( $r = 0.040$ ) indicates no significant correlation between education and Transactional Leadership (two-tailed significance of 0.635). So, the null hypothesis is accepted.

### Education and Laissez-faire Leadership

H<sub>0</sub>: There is no significant correlation between education and Laissez-faire Leadership

Pearson's correlation coefficient ( $r = -0.031$ ) indicates no significant correlation between education and Laissez-faire Leadership (two-tailed significance of 0.715). So, the null hypothesis is accepted.

## **Experience and Leadership Styles**

### Experience and Transformational Leadership

H<sub>0</sub>: There is no significant correlation between experience and Transformational Leadership

Pearson's correlation coefficient ( $r = 0.067$ ) indicates no significant correlation between experience and Transformational Leadership (two-tailed significance of 0.430). So, the null hypothesis is accepted.

### Experience and Transactional Leadership

H<sub>0</sub>: There is no significant correlation between experience and Transactional Leadership

Pearson's correlation coefficient ( $r = -0.059$ ) indicates no significant correlation between experience and Transactional Leadership (two-tailed significance of 0.485). So, the null hypothesis is accepted.

## Experience and Laissez-faire Leadership

H<sub>0</sub>: There is no significant correlation between experience and Laissez-faire Leadership

Pearson's correlation coefficient ( $r = 0.054$ ) indicates no significant correlation between experience and Laissez-faire Leadership (two-tailed significance of 0.526). So, the null hypothesis is accepted.

## Summary

**Appendix I: Table 53. Relationship between Number of Employees, Demographics of Respondents and Leadership Styles**

| Demographics of Respondents | Leadership Styles           | Relationship                |
|-----------------------------|-----------------------------|-----------------------------|
| Number of Employees         | Transformational Leadership | Medium positive correlation |
|                             | Transactional Leadership    | -                           |
|                             | Laissez-faire Leadership    | -                           |
| Age                         | Transformational Leadership | -                           |
|                             | Transactional Leadership    | -                           |
|                             | Laissez-faire Leadership    | -                           |
| Education                   | Transformational Leadership | -                           |
|                             | Transactional Leadership    | -                           |
|                             | Laissez-faire Leadership    | -                           |
| Experience                  | Transformational Leadership | -                           |
|                             | Transactional Leadership    | -                           |
|                             | Laissez-faire Leadership    | -                           |

Table 53 above reports a medium positive correlation between number of employees and Transformational Leadership, but no correlation between number of employees and either Transactional Leadership or Laissez-faire Leadership. It was also found that there was no correlation between demographics of respondents and Leadership Styles.

**Hypothesis F: There is a Significant Relationship between Number of Employees, Demographics of Respondents and Organisational Effectiveness**

**Number of Employees and Organisational Effectiveness**

H<sub>0</sub>: There is no significant correlation between number of employees and Organisational Effectiveness.

Pearson's correlation coefficient ( $r = 0.415$ ) indicates that there is significant correlation between number of employees and Organisational Effectiveness (two-tailed significant of 0.000). So, the null hypothesis is rejected. This means that there is a medium level of positive correlation between variables. Besides,  $R^2$  is equal to 0.17. This means that approximately 17 percent of the total variance of Organisational Effectiveness can be explained by the total variance of number of employees.

**Age and Organisational Effectiveness**

H<sub>0</sub>: There is no significant correlation between age and Organisational Effectiveness.

Pearson's correlation coefficient ( $r = 0.038$ ) indicates no significant correlation between age and Organisational Effectiveness (two-tailed significant of 0.654). So, the null hypothesis is accepted.

## Education and Organisational Effectiveness

H<sub>0</sub>: There is no significant correlation between education and Organisational Effectiveness.

Pearson's correlation coefficient ( $r = 0.078$ ) indicates no significant correlation between education and Organisational Effectiveness (two-tailed significant of 0.362). So, the null hypothesis is accepted.

## Experience and Organisational Effectiveness

H<sub>0</sub>: There is no significant correlation between experience and Organisational Effectiveness.

Pearson's correlation coefficient ( $r = 0.050$ ) indicates no significant correlation between experience and Organisational Effectiveness (two-tailed significant of 0.558). So, the null hypothesis is accepted.

## Summary

**Appendix I: Table 54 . Relationship between Number of Employees, Demographics of Respondents and Organisational Effectiveness**

| Demographics of Respondents | Relationship to Organisational Effectiveness |
|-----------------------------|--|
| Number of Employees         | Medium positive correlation                  |
| Age                         | -  |
| Education                   | -  |
| Experience                  | -  |

Table 54 above reports a medium positive correlation between number of employees and Organisational Effectiveness. However, there was no correlation between demographics of respondents and Organisational Effectiveness.

## **Hypothesis G: There is a Significant Relationship between Learning Styles and Leadership Styles**

### **Learning Styles and Leadership Styles**

#### Activist and Transformational Leadership

H<sub>0</sub>: There is no significant correlation between Activist and Transformational Leadership

Pearson's product-moment correlation coefficient indicates significant correlation between Activist and Transformational Leadership (two-tailed significant of 0.000 at the 0.01 significance level). So, the null hypothesis is rejected. The Pearson's correlation coefficient  $r$  is equal to  $-0.522^{**}$  which suggests a strong negative correlation between two variables. It implies that the higher the level of Activist the managers have, the lower the level of Transformational Leadership they possess. The value of  $R^2$  is  $(-0.522 * -0.522) = 0.272$ , meaning that approximately 27 percent of the variance of Transformational Leadership can be explained by the variance of Activist Learning Style in managers.

### Pragmatist and Transformational Leadership

H<sub>0</sub>: There is no significant correlation between Pragmatist and Transformational Leadership

Pearson's correlation coefficient ( $r = 0.435^{**}$ ) indicates significant correlation between Pragmatist and Transformational Leadership (two-tailed significance of 0.000 at the 0.01 significant level). So, the null hypothesis is rejected. This means that there is a medium positive correlation between two variables. Calculated  $R^2$  is equal to 0.189. This means that approximately 18 percent of the total variance of Transformational Leadership can be explained by the total variance of Pragmatist.

### Reflector and Transformational Leadership

H<sub>0</sub>: There is no significant correlation between Reflector and Transformational Leadership

Pearson's correlation coefficient ( $r = 0.404^{**}$ ) indicates significant correlation between Reflector and Transformational Leadership (two-tailed significance of 0.000 at the 0.01 significant level). Therefore, the null hypothesis is rejected. It suggests that there is a medium positive correlation between the two variables. In addition,  $R^2$  is equal to 0.163. This means that approximately 16 percent of the total variance of Transformational Leadership can be explained by the total variance of Reflector.

### Theorist and Transformational Leadership

H<sub>0</sub>: There is no significant correlation between Theorist and Transformational Leadership

Pearson's correlation coefficient ( $r = 0.274^{**}$ ) indicates significant correlation between Theorist and Transformational Leadership (two-tailed significance of 0.001 at the 0.01 significant level). So, the null hypothesis is rejected. There is a weak positive correlation between the two variables, with an  $R^2$  is equal to 0.075, meaning that approximately 7.5 percent of the total variance of Transformational Leadership can be explained by the total variance of Theorist.

### Activist and Transactional Leadership

H<sub>0</sub>: There is no significant correlation between Activist and Transactional Leadership

Pearson's correlation coefficient ( $r = -0.040$ ) indicates no significant correlation between Activist and Transactional Leadership (two-tailed significance of 0.637). So, the null hypothesis is accepted.

### Pragmatist and Transactional Leadership

H<sub>0</sub>: There is no significant correlation between Pragmatist and Transactional Leadership

Pearson's correlation coefficient ( $r = -0.042$ ) indicates no significant correlation between Transactional Leadership and Pragmatist (two-tailed significance of 0.620). So, the null hypothesis is accepted.

### Reflector and Transactional Leadership

H<sub>0</sub>: There is no significant correlation between Reflector and Transactional Leadership

Pearson's correlation coefficient ( $r = -0.152$ ) indicates no significant correlation between Reflector and Transactional Leadership (two-tailed significance of 0.072). So, the null hypothesis is accepted.

### Theorist and Transactional Leadership

H<sub>0</sub>: There is no significant correlation between Theorist and Transactional Leadership

Pearson's correlation coefficient ( $r = -0.067$ ) indicates no significant correlation between Theorist and Transactional Leadership (two-tailed significance of 0.433). So, the null hypothesis is accepted.

### Activist and Laissez-faire Leadership

H<sub>0</sub>: There is no significant correlation between Activist and Laissez-faire Leadership

Pearson's correlation coefficient ( $r = 0.174^*$ ) indicates significant correlation between Activist and Laissez-faire Leadership (two-tailed significance of 0.039). So, the null hypothesis is rejected. This means that there is a weak positive correlation between two variables. In addition,  $R^2$  is equal to 0.030. This means that approximately 3 percent of the total variance of Laissez-faire Leadership can be explained by the total variance of Activist.

### Pragmatist and Laissez-faire Leadership

H<sub>0</sub>: There is no significant correlation between Pragmatist and Laissez-faire Leadership

Pearson's correlation coefficient ( $r = -0.060$ ) indicates no significant correlation between Pragmatist and Laissez-faire Leadership styles (two-tailed significance of 0.485). So, the null hypothesis is accepted.

### Reflector and Laissez-faire Leadership

H<sub>0</sub>: There is no significant correlation between Reflector and Laissez-faire Leadership

Pearson's product-moment correlation coefficient ( $r = -0.040$ ) indicates no significant correlation between Reflector and Laissez-faire Leadership style (two-tailed significance of 0.636). So, the null hypothesis is accepted.

### Theorist and Laissez-faire Leadership style

H<sub>0</sub>: There is no significant correlation between Theorist and Laissez-faire Leadership style

Pearson's correlation coefficient ( $r = -0.022$ ) indicates no significant correlation between Theorist and Laissez-faire Leadership style with a two-tailed significance of 0.795. So, the null hypothesis is accepted.

## Summary

**Appendix I: Table 55. Relationship between Learning Styles and Leadership Styles**

| Learning Styles | Leadership Styles           | Relationship                |
|-----------------|-----------------------------|-----------------------------|
| Activist        | Transformational Leadership | Strong negative correlation |
|                 | Transactional Leadership    | -                           |
|                 | Laissez-faire Leadership    | Weak positive correlation   |
| Pragmatist      | Transformational Leadership | Medium positive correlation |
|                 | Transactional Leadership    | -                           |
|                 | Laissez-faire Leadership    | -                           |
| Reflector       | Transformational Leadership | Medium positive correlation |
|                 | Transactional Leadership    | -                           |
|                 | Laissez-faire Leadership    | -                           |
| Theorist        | Transformational Leadership | Weak positive correlation   |
|                 | Transactional Leadership    | -                           |
|                 | Laissez-faire Leadership    | -                           |

**Appendix I: Table 56. Relationship between Leadership Styles and Learning Styles**

| Leadership Styles           | Learning Styles | Relationship                |
|-----------------------------|-----------------|-----------------------------|
| Transformational Leadership | Activist        | Strong negative correlation |
|                             | Pragmatist      | Medium positive correlation |
|                             | Reflector       | Medium positive correlation |
|                             | Theorist        | Weak positive correlation   |
| Transactional Leadership    | Activist        | -                           |
|                             | Pragmatist      | -                           |
|                             | Reflector       | -                           |
|                             | Theorist        | -                           |
| Laissez-faire Leadership    | Activist        | Weak positive correlation   |
|                             | Pragmatist      | -                           |
|                             | Reflector       | -                           |
|                             | Theorist        | -                           |

Table 55 and 56 above report a strong negative correlation between Transformational Leadership and Activist, and a medium positive correlation between Transformational Leadership and Pragmatist as well as Transformational Leadership and Reflector. There was no correlation between Transactional Leadership and Learning Styles. It was found that there was a weak positive correlation between Laissez-faire Leadership and Activist.

Moreover, there was no correlation among Laissez-faire Leadership, Pragmatist, Reflector and Theorist.

### **Hypothesis H: There is a Significant Relationship between Learning Styles and Organisational Effectiveness**

#### **Learning Styles and Organisational Effectiveness.**

##### Activist and Organisational Effectiveness

H<sub>0</sub>: There is no significant correlation between Activist and Organisational Effectiveness.

Pearson's correlation coefficient ( $r = -0.693^{**}$ ) indicates significant correlation between Activist and Organisational Effectiveness (two-tailed significance of 0.000 at the 0.01 significant level). So, the null hypothesis is rejected. This means that there is a high level of negative correlation between two variables. In addition the Coefficient of Determination or  $R^2$  is equal to 0.480. This means that approximately 48 percent of the total variance of Organisational Effectiveness can be explained by the total variance of Activist.

### Pragmatist and Organisational Effectiveness

H<sub>0</sub>: There is no significant correlation between Pragmatist and Organisational Effectiveness.

Pearson's correlation coefficient ( $r = 0.555^{**}$ ) indicates significant correlation between Pragmatist and Organisational Effectiveness (two-tailed significance of 0.000 at the 0.01 significant level). So, the null hypothesis is rejected. This means that there is a strong positive correlation between two variables. In addition  $R^2$  is equal to 0.31. This means that approximately 31 percent of the total variance of Organisational Effectiveness can be explained by the total variance of Pragmatist.

### Reflector and Organisational Effectiveness

H<sub>0</sub>: There is no significant correlation between Reflector and Organisational Effectiveness.

Pearson's correlation coefficient ( $r = 0.566^{**}$ ) indicates significant correlation between Reflector and Organisational Effectiveness (two-tailed significance of 0.000 at the 0.01 significant level). So, the null hypothesis is rejected. This means that there is a strong positive correlation between two variables. In addition,  $R^2$  is equal to 0.32. This means that approximately 32 percent of the total variance of Organisational Effectiveness can be explained by the total variance of Reflector.

## Theorist and Organisational Effectiveness

H<sub>0</sub>: There is no significant correlation between Theorist and Organisational Effectiveness.

Pearson's correlation coefficient ( $r = 0.225^{**}$ ) indicates a significant correlation between Theorist and Organisational Effectiveness (two-tailed significance of 0.008 at the 0.01 significant level). So, the null hypothesis is rejected. This means that there is a weak positive correlation between the two variables, with  $R^2$  is equal to 0.05, meaning that approximately 5 percent of the total variance of Organisational Effectiveness can be explained by the total variance of Theorist.

## Summary

**Appendix I: Table 57. Relationship between Learning Styles and Organisational Effectiveness**

| Learning Styles | Relationship to Organisational Effectiveness |
|-----------------|--|
| Activist        | Strong negative correlation                  |
| Pragmatist      | Strong positive correlation                  |
| Reflector       | Strong positive correlation                  |
| Theorist        | Weak positive correlation                    |

Table 57 reports a strong negative correlation between Activist and Organisational Effectiveness. In comparison, there is a strong positive correlation between Pragmatist and Organisational Effectiveness as well as Reflector and Organisational Effectiveness. Lastly, there is a weak positive correlation between Theorist and Organisational Effectiveness.

## **Hypothesis I: There is a Significant Relationship between Leadership Styles and Organisational Effectiveness**

### **Leadership Styles and Organisational Effectiveness**

#### Transformational Leadership and Organisational Effectiveness

H<sub>0</sub>: There is no significant correlation between Transformational Leadership and Organisational Effectiveness.

Pearson's correlation coefficient ( $r = 0.733^{**}$ ) indicates a significant correlation between Transformational Leadership and Organisational Effectiveness (two-tailed significance of 0.000 at the 0.01 significant level). Therefore, the null hypothesis is rejected. This means that there is a strong positive correlation between two variables. In addition,  $R^2$  is equal to 0.54. This means that approximately 54 percent of the total variance of Organisational Effectiveness can be explained by the total variance of Transformational Leadership.

#### Transactional Leadership and Organisational Effectiveness

H<sub>0</sub>: There is no significant correlation between Transactional Leadership and Organisational Effectiveness.

Pearson's correlation coefficient ( $r = 0.002$ ) indicates no significant correlation between Transactional Leadership and Organisational Effectiveness (two-tailed significance of 0.985). So, the null hypothesis is accepted.

## Laissez-faire Leadership and Organisational Effectiveness

H<sub>0</sub>: There is no significant correlation between Laissez-faire Leadership and Organisational Effectiveness

Pearson's correlation coefficient ( $r = -0.297^{**}$ ) indicates a significant correlation between Laissez-faire Leadership and Organisational Effectiveness (two-tailed significance of 0.000 at the 0.01 significant level). So, the null hypothesis is rejected. This means that there is a medium negative correlation between the two variables, with an  $R^2$  of 0.09.

### Summary

**Appendix I: Table 58. Relationship between Leadership Styles and Organisational Effectiveness**

| Leadership Styles           | Relationship to Organisational Effectiveness |
|-----------------------------|--|
| Transformational Leadership | Strong positive correlation                  |
| Transactional Leadership    | -  |
| Laissez-faire Leadership    | Weak negative correlation                    |

Table 58 above reports a strong positive correlation between Transformational Leadership and Organisational Effectiveness. However, there was no correlation between Transactional Leadership and Organisational Effectiveness. Lastly, there is a weak negative correlation between Laissez-faire Leadership and Organisational Effectiveness.