Exploring the Implications of Vertical and Shared Leadership for Team Effectiveness in Retail Shops in Hong Kong

by

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Declaration

"The thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968."

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Eunice Sui-Yi, Chen (DBA student)

Date: _____

Acknowledgments

I would like to dedicate this thesis to my father, who passed away while I was studying the doctorate degree. I was too focused on my work and study during his sickness to be able to spend as much time with him on his last journey as he deserved. I am indebted to him, for his love, guidance, and endless support. Having persistence and endurance in completing one's promise was always his motto. Now I understand and have practised it through the study of this degree. At this moment, I just want to express my deepest gratitude to him.

Another important and influential person I wish to thank is my mother, who has stood by me unconditionally and compassionately during this long journey. She has always put the family as her first priority and sacrifices her time and health for our wellbeing. My heartfelt thanks go to her for her enduring love, care, and support.

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Abstract

Leadership has long been an area of concern in society. Most past studies have focused on appointed leaders and their relationships with their subordinates (Yukl, 2006). This traditional form of leadership by assigned leaders is known as vertical leadership. However, in the past decade, a few scholars (Perry et al., 1999, Pearce and Conger, 2003b, Mehra et al., 2006, Carson et al., 2007) have queried the paradigm and suggested that leadership can also be an activity that is shared among team members. This shared form of leadership is named shared leadership.

A few studies in the United States (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006) have shown empirically that shared leadership is an important predictor of team effectiveness, more important than vertical leadership. There have not been any studies to explore whether this is also the case in Asian cities like Hong Kong. Therefore, the purpose of this study was to investigate the impact of traditional vertical leadership and the emerging shared leadership on team effectiveness in retail shops in Hong Kong.

This research was a replication of the study by Ensley, Hmieleski, and Pearce (2006) of new venture top management teams and that by Pearce and Sims (2002) of change management work teams in the United States. It used a positivism approach and quantitative research method to study 43 retail shops of a mobile operator in Hong Kong. The results align with overseas studies that both vertical and shared leadership are related significantly to team effectiveness. However, contrary to the findings of the earlier studies, vertical leadership appears to have a greater impact than shared leadership.

This research has made a new contribution to the field by extending the study of shared leadership to the Hong Kong retail shop context. In addition, the finding that vertical leadership is more important than shared leadership suggests a new perspective for

researchers to understand the adoption of shared leadership in a different contextual situation. The findings also support the retail shop management team to design its management approach and behaviors better for shop effectiveness. Of course, appropriate training and development programs can be designed to fit these purposes.

1. Chapter 1: Research Overview

1.1 Introduction

In this research, the implications of vertical and shared leadership for team effectiveness in Hong Kong retail industry were explored. The research was a replication of the study by Ensley, Hmieleski, and Pearce (2006) of new venture top management teams and that by Pearce and Sims (2002) of change management work teams in the United States. In their research, both vertical and shared leadership were found to be related positively to team performance, while shared leadership was found to be more effective than vertical leadership. The objective of this research was to explore the impact of both vertical and shared leadership for team effectiveness in the Hong Kong retail contextual environment. The research question guiding this research was whether shared leadership is more important than vertical leadership in predicting team effectiveness in Hong Kong.

This chapter provides an overview of this thesis. First, it covers the driver of this study: the growing importance of the retail industry in Hong Kong and the demand for leadership research in this industry. Second, a short literature review is presented on vertical and shared leadership in team management. Third, the purpose and contribution of this study are described. Fourth, the research hypotheses and the research methodology used to address these questions are summarized. Finally, the findings and organization of this thesis are presented.

1.2 Research Background

Hong Kong is a Special Administrative Region of the People's Republic of China and is located in the south of China, bordering the South China Sea. Under the "One Country, Two Systems" policy, Hong Kong remains a free market economy, without the influence of China's socialist economic system. Even with only 1,054 sq km of land and around seven million residents (Hong Kong Census and Statistics Department, 2011d),

Hong Kong had an estimated Gross Domestic Product (GDP) by purchasing power parity of US$325.8 billion in 2010 and was ranked 37th in the world (CIA, 2011e).

1.2.1 The importance of the retail industry in Hong Kong

With the moving of the manufacturing industry to mainland China in recent decades, Hong Kong has become highly dependent on international trade, finance and service. In 2010, the service sector accounted for over 90% of the city's GDP, with 28% from wholesale, retail, import and export trades, hotels and restaurants (Hong Kong Retail Management Association, 2011c). During the 2008 World Financial Crisis, Hong Kong's GDP fell over four quarters, then started to bounce back in the fourth quarter of 2009. With the Government's temporary fiscal policy to boost economic growth and the Chinese Government's reduction of travel restriction for mainland Chinese people to visit Hong Kong, the GDP grew remarkably in 2010 to a new record high in the third quarter. Among various industries, the retail sector outperformed the rest. The total retail sales, by value and volume, increased by 18.3% and 15.5% respectively in 2010 compared to the previous year. Table 1 summarizes the Year-on-Year percentage change of the retail sales in terms of value and volume. Figure 1 plots the total retail sales from 2006 to 2010.

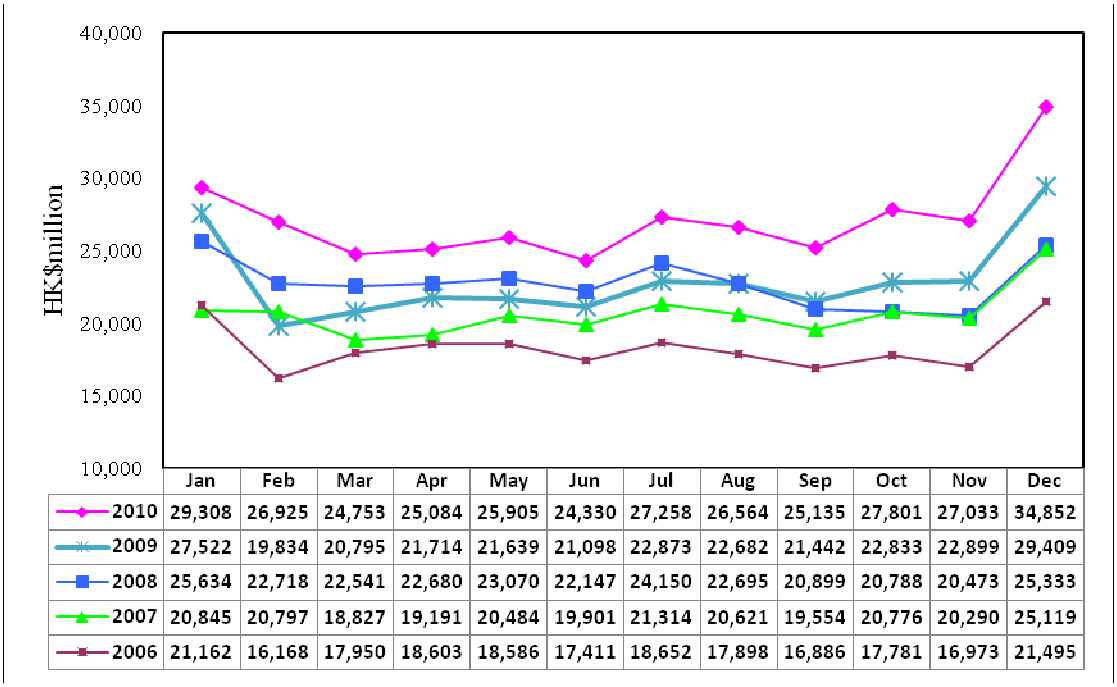
The retail industry is growing in importance in Hong Kong. It employed more than 240,000 persons, with around 61,700 shops, in 2010 (Hong Kong Retail Management Association, 2011c). This industry provides services for both local residents and overseas visitors and creates wealth for Hong Kong people, both directly and indirectly.

Table 1-1: Year-on-Year' Percentage Rate of Change of Total Retail Sales, 2006-2010

Year	Year-on-Year' Percentage Rate of Change (compare with the same 'Period' in previous year)	
	in value terms	in volume terms
1-12/2010	+18.3%	+15.5%
2009	+0.6%	-0.8%
2008	+10.5%	+5.0%
2007	+12.8%	+10.1%
2006	+7.3%	+5.8%

Data Source: Census & Statistics Department, HKSAR in Hong Kong Retail Management Association (2011b)

Figure 1-1: Total Retail Sales of Hong Kong, 2006-2010 (in HK dollars terms)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2010	29,308	26,925	24,753	25,084	25,905	24,330	27,258	26,564	25,135	27,801	27,033	34,852
2009	27,522	19,834	20,795	21,714	21,639	21,098	22,873	22,682	21,442	22,833	22,899	29,409
2008	25,634	22,718	22,541	22,680	23,070	22,147	24,150	22,695	20,899	20,788	20,473	25,333
2007	20,845	20,797	18,827	19,191	20,484	19,901	21,314	20,621	19,554	20,776	20,290	25,119
2006	21,162	16,168	17,950	18,603	18,586	17,411	18,652	17,898	16,886	17,781	16,973	21,495

Figure for December 2010 is Provisional Figure only, while all the others are Revised Figures.
Data Source: Census & Statistics Department, HKSAR in Hong Kong Retail Management Association (2011b)

1.2.2 Leadership demands in the retail industry

This notable year-on-year increment in the retail industry was probably due to the economic upturn and the surge of visitors from mainland China. It is likely that both the China and Hong Kong Governments would like to keep the policy of allowing mainland Chinese residents to visit Hong Kong easily. Since Hong Kong is a tax-free city, with no value-added tax or sales tax for any types of purchase, a lot of the visitors come to

shop for all types of products, including food, electronic appliances, communication equipment, and many luxury products. Therefore, the outlook for the retail industry is still promising in the near future and it will be an important pillar for Hong Kong's economy in the long run (Hong Kong Retail Management Association, 2011b).

With the blooming of both total retail sales value and volume, more and more shops and laborers are required in this field. However, the quantity of skilled laborers cannot match the market demands. Companies are troubled with training and retaining experienced staff to fit the demand. In particular, there is a lack of middle managers who can look after shop operations as well as train and coach the staff. The workloads and management skill requirements for shop managers have increased enormously. They have to face swift changes in the market situation, higher and higher demands from the customers, and higher expectations regarding the effectiveness and efficiency of shop operation (Hong Kong Retail Management Association, 2011a). The leadership skills of this middle management will be the key success factor for lots of retail businesses (Hong Kong Retail Management Association, 2011a).

Nevertheless, not much research has been found to investigate what leadership skills or styles are better for the retail industry, especially in Hong Kong where the customers and working contexts are quite different from those in western countries. Therefore, this research investigated the leadership behaviors and styles that are important for managing retail shops in Hong Kong so as to improve their operational effectiveness.

1.3 **Leadership development background**

Even though leadership has long been of interest to society, scientific research in this area was only started in twentieth century. The meaning of leadership is not a fixed term; it keeps changing according to the contextual situation (Dess and Picken, 2000). For example, in the early research it was centered more on control and monitoring (Pearce and Conger, 2003a), with a focus on organizational forms, structures, and processes.

Later studies found that a supportive and friendly manner shown by leaders towards their subordinates was also a key to team effectiveness (Fleishman, 1953). Fleishman defined two important roles of a leader: consideration and initiating structure. The former is concerned with the subordinates' feelings and acceptance, while the latter pays attention to the structure and process for a team to achieve an assigned task. This theory has dominated the leadership study field for a few decades, from the 1950s to 1980s (Yukl, 2006). In recent decades, with education more widely accessible, leadership has had to adopt a more empowering and participative format (Vroom and Yetton, 1973). Some have even argued that leadership can be substituted or neutralized by the subordinates, work design, organizational structure, or reward systems (Kerr and Jermier, 1978). On the other hand, a leader can use vision and inspiration to transform and motivate subordinates to meet higher-order needs (Bass and Avolio, 1993, Bass, 1985a). Therefore, the definition of leadership keeps changing according to the contextual situation.

In this research, the recent definition of leadership put forward by Yukl (2006, p.10) has been adopted. He defined leadership as:

> "the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives."

In a team, there are two possible sources of leadership that can exert influence over others in order to achieve shared objectives (Ensley et al., 2006). The first one is the vertical leader who is assigned to lead the team – Vertical Leadership. The other one involves the team members who collaboratively support and lead each other within the team context – Shared Leadership. These two sources of leadership form the core discussion in this study. Are both types of leadership important to team effectiveness? Is one more important than the other type? The following paragraphs will explain these two types of leadership as observed in team management.

1.3.1 Vertical leadership

Historically, research has focused on leaders' traits, behaviors, abilities and how they influence their followers to accomplish shared objectives (Hemphill and Coons, 1957, Fleishman et al., 1991). Leadership is always treated as the responsibility of a single person, the appointed leader who has been given the authority by the company to lead the organization or team. The relationship between the assigned leader and his or her subordinates always has a vertical top-down influence, hence this model is named vertical leadership. This leader takes up the role of directing the subordinates with methods and processes to accomplish designated goals, expressing appreciation of staff when they are doing well through both verbal and material rewards, motivating them with visions and encouraging creative breakthroughs, and empowering their self leadership, self reward, and participative decision making (Pearce et al., 2003, Judge and Piccolo, 2004, Burke et al., 2006). These roles are summarized in the typology of leadership described by Pearce et al. (2003) as directive, transactional, transformational, and empowering leadership behavioral types. This typology was used to measure vertical leadership in this research.

In the retail industry, the shop managers or supervisors are the vertical leaders assigned to manage the shop operation, assign manpower at different periods of the day, lead staff to achieve the shop's objectives, and train and coach staff.

1.3.2 Shared leadership

The effectiveness of relying singly on a vertical leader to lead the team has been queried in the research field (Pearce and Conger, 2003b). With the increase in knowledge workers who are seeking more autonomy and involvement in decision making (Wolff et al., 2002), the increase in the complexity of the work (Day et al., 2004, Pearce, 2004), and the higher expectations from the customers it has become more difficult for a single leader to handle the situation alone. A few scholars (Perry et al., 1999, Pearce and Conger, 2003b, Carson et al., 2007, Manz et al., 2010) have proposed the concept of

shared leadership, with the leadership activity within a team or organization shared among team members. A team member can give direction and instruction to colleagues when he or she is experienced in that area or can get certain expertise. At the same time, a team member can also recommend material rewards or verbal appreciation for colleagues who have done well. Empowering colleagues to take up more challenging work, participating in decision making, and self management can also be done by peers. Providing inspirational ideas and vision can also motivate peers. Therefore, the team members can share the leadership role within the team. They can show shared directive, transactional, transformational, and empowering leadership behaviors among team members. This new form of leadership source is referred to as shared leadership, and was defined by Pearce & Conger (2003, p.1) as follows:

> "Shared leadership is a dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both."

As explained above, this type of influence process does not rely solely on a single appointed leader to influence the team, but often involves the sharing of the leadership role within a set of individuals such as peers. Therefore in a retail shop environment, the frontline sales can share the leadership role instead of simply relying on the assigned leader.

1.4 **Purposes of the research and research questions**

Both vertical and shared leadership are commonly observed in team management and operation (Ensley et al., 2006). Are they both important to team effectiveness? Since this question has not been answered in the Asian context in previous research, the purpose of this study was to understand the impact of vertical and shared leadership on the team effectiveness of retail shops in Hong Kong. If both are counted, which one has the higher impact?

Based on this question, the specific research questions for this study were:

1. Does shared leadership have a positive impact on team effectiveness in Hong Kong?
2. Does vertical leadership have a positive impact on team effectiveness in Hong Kong?
3. Is shared leadership a more important predictor of team effectiveness than vertical shared leadership in Hong Kong?

Through understanding the impact of different leadership models on team effectiveness, corporations may be given a hint about better retail shop management and setting human resource strategies which can include recruitment direction, management philosophy, appraisal criteria, training program design and retention tactics (Perry et al., 1999). At the same time, the results of the study can contribute to the extant research about whether vertical and shared leadership are both important in retail shop management in Hong Kong, since most previous studies of shared leadership were done in the United States or Europe.

1.5 **Hypotheses**

A few empirical studies on the importance of vertical and shared leadership have been done in the United States (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006). These explored the impact of vertical and shared leadership on new venture top management teams (Ensley et al., 2006), virtual social worker teams in an educational program (Pearce et al., 2004) and change management teams in an automotive manufacturing firm (Pearce and Sims, 2002). All of these studies found shared leadership to be an important predictor of team effectiveness or outcomes. Vertical leadership was found to be important in new venture top management teams and change management teams, but not significant for virtual social worker teams. In comparing the relative importance of vertical and shared leadership, all three studies illustrated that shared leadership was more useful and important in predicting team effectiveness.

Based on these studies, the three hypotheses proposed in this research are:

Hypothesis 1: Vertical leadership will be related positively to team effectiveness, such that the more directive, transactional, transformational and empowering the shop management behaviors are, the higher the team effectiveness in the shop will be.
Hypothesis 2: Shared leadership will be related positively to team effectiveness, such that the more directive, transactional, transformational and empowering the team members' behaviors are, the higher the team effectiveness in the shop will be.
Hypothesis 3: Shared leadership will be more important than vertical leadership in predicting team effectiveness.

1.6 **Research Methodology**

This research methodology replicated the previous empirical research on vertical and shared leadership theory done by Ensley et al. (2006), Pearce et al. (2004), and Pearce and Sims (2002) in the United States. This methodology fell into the positivism paradigm with a realistic ontology and objective epistemology. A quantitative research method and deductive reasoning approach were used to test the three hypotheses about the impact of vertical and shared leadership on retail shop management in Hong Kong. The subjects' opinions were collected via questionnaires in a non-contrived study setting. Therefore the researcher's personal values and perspectives were kept apart from the research subjects and the results were collected objectively (Bryman, 2008).

In order to isolate the influence of situational variables, such as operational rules and standards, working culture, product nature, and other industry factors, one single organization, a mobile communications operator, was invited to participate in this research. This company has 47 retail shops distributed widely in Hong Kong and offering a wide range of mobile services and equipment to the local residents. Each shop has 3 to 18 staff. The shop managers and/or supervisors assigned to be in charge of the shops are vertical leaders and the frontline sales staff, who are responsible for selling mobile service plans and equipment to the customers, are shared leaders.

With the advantages of low administration cost, fast response time, and easier data entry and analysis (Ilieva et al., 2002, Evans and Mathur, 2005), a web-based self-administered survey was used to collect responses from all the frontline sales staff and shop managers. An email containing the information statement (Appendix 1 for English and 2 for Chinese) and the hyperlink to the survey web page were distributed by the company's Human Resource Manager to all the frontline sales staff and the shop managers. Both the email and the web page clearly stated the purpose of this study, the voluntary nature of their responses, confidentiality, and the contact information of the University of Newcastle, the researcher and her supervisor.

Data analysis included descriptive statistics, reliability and validity testing, and inferential statistical analysis. The popular Cronbach's alpha coefficient (Cronbach, 1946) was used to test the internal reliability of the measures. Since this research studied group level effects, the individual responses were aggregated to shop level for data analysis. The appropriateness of aggregating individual ratings was assessed using within-group interrater reliability (James et al., 1984). Exploratory factor analysis was applied to verify the construct validity of the measures of vertical leadership, shared leadership and team effectiveness. Pearson's correlation coefficient was used to assess the inter-correlation among the studied variables.

With multiple independent variables and one dependent variable with interval measurement, multiple regression statistical analysis was considered to be suitable for hypotheses testing. The coefficient of determination, R^2, and the statistical significance of the overall model were used to calibrate the predictive accuracy and important of the independent variables, the vertical and shared leadership. The magnitude of the standardized regression coefficients and the associated t-test probabilities were used to evaluate the relative impact of individual independent variables, such as vertical directive and vertical transaction leadership behaviors (Mason and Perreault, 1991).

1.7 **Contribution of the Research**

Even though the concept of shared leadership sprouted as early as 1924 (Mary Parker Follett in Pearce and Conger, 2003a), it did not flourish until recent decades. Conger and Pearce (2003, p.301) mentioned that "we have only scratched the surface" of shared leadership. A more recent article by Pearce et al. (2008) described that "shared leadership is, after all, still a relatively 'primitive term'". This suggests that there is much potential for future study.

In this research, the researcher tried to advance the study of shared leadership in Hong Kong, specifically in retail shop management teams. Most of the previous empirical studies of shared leadership (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006) were conducted in the United States, with some in Europe (Hoch et al., 2010); however, research in Asian cities has been limited. Therefore, this research is significant in advancing the study of shared leadership in an Asian city like Hong Kong.

In addition, the results of this research will have practical management implications for retail industry operation. By knowing which source of leadership, vertical or shared, is impactful for retail shop management, the retail company can decide the appropriate management approach, set the most suitable training and development program for both vertical leaders and team members in line with the management approach, and design the appraisal criteria and retention tactics.

1.8 **Research findings**

Similar to overseas research, both vertical and shared leadership behaviors were found in this study to be related positively to team effectiveness in retail shop management in Hong Kong. However, in contrast to the study in the United States, shared leadership was not found to be more important than vertical leadership for team effectiveness. In fact, shared leadership was seen as marginally less important than vertical leadership. This illustrates that other factors may influence the effectiveness of shared leadership

adoption in Hong Kong retail shop management teams. Such factors can be national cultural differences among different countries, different work teams which have different team member skills, team member familiarity, team member proximity, team maturity, team diversity, and team size (Perry et al., 1999). A detailed discussion and recommendations will be discussed in Chapters 4 and 5.

1.9 **Organization of this thesis**

This thesis consists of five chapters. Chapter 2 provides a review of the literature related to the development of vertical and shared leadership, the respective contributions and empirical studies of these two types of leaderships, and explanations of the underpinning research model, hypotheses and measurement.

Chapter 3 presents the strategy and process applied to collect the necessary data to answer the research questions and test the hypotheses. A detailed description is given of the methodology, including the method deployed, sample collection, procedures taken, and the instruments used in collecting the measures for all variables. Statistical tools applied in analyzing the data are presented as well.

Chapter 4 reports the findings of this quantitative research. Descriptive statistics, reliability, validity and influential statistical analysis are presented. The results of testing the three hypotheses are explained in this chapter.

Chapter 5 provides an overview of the results and follows with the discussion of both theoretical and practical implications of the results. Limitations of this study and the recommendations for future research are considered.

1.10 Chapter conclusion

This chapter has provided an overview of this thesis. It has presented the need for this research from the perspective of the Hong Kong economic situation, a short review of literature on vertical and shared leadership, the purpose and contribution of this study, the research hypotheses and research methodology, and the findings and organization of the thesis.

2. Chapter 2: Literature Review

2.1 Introduction

In this chapter, an overview of literature related to the development of vertical and shared leadership will be presented in three core parts.

The first part mainly reviews the historical development of leadership: the change in leadership definitions over the past decades; the trend in leadership requirements and the need for shared leadership in today's contextual situation; and the core historical theories that lead to the development of shared leadership.

The second part of the chapter discusses the two types of leadership within a team, vertical leadership from the appointed leader, and shared leadership among team members. Their respective contributions and the findings of previous empirical studies are presented and compared to form the research questions for this research.

The final part of the chapter presents the measure and hypotheses of this study. Three hypotheses were developed to test the research questions. The measure of leadership behaviors was adopted from Pearce et al. (2003), who empirically derived a comprehensive typology for measuring four types of leadership behaviors: directive, transactional, transformational, and empowering. These four types of leadership behaviors can be used by both the formal leader and team members in a team. The final section discusses the measurement of the dependent variable, team effectiveness.

2.2 Definition of leadership

It was mentioned in Chapter 1 that leadership has long been an area of concern in society. However, scientific research on this topic was not begun until the twentieth century (Yukl, 2006). Many of the early studies focused on the traits, behaviors, and abilities of a leader (Hemphill and Coons, 1957, Bons and Fiedler, 1976, Fleishman et

al., 1991). They also explored the situations in which a leader gains his/her power; how well he/she can influence his/her followers to accomplish the task assigned; and what leadership qualities and skills can best determine effectiveness. Most of these studies focused on the leader, who is normally assigned to take up the leadership role, and how he/she exerts influence on the followers to accomplish an objective. This can be identified clearly through the definitions of leadership:

> "Leadership is the behavior of an individual … directing the activities of a group toward a shared goal." (Hemphill and Coons, 1957, p. 7);
>
> "Leadership is exercised when persons … mobilize … institutional, political, psychological, and other resources so as to arouse, engage, and satisfy the motives of followers." (Burns, 1978, p. 18);
>
> "Leadership is realized in the process whereby one or more individuals succeed in attempting to frame and define the reality of others." (Smircich and Morgan, 1982);
>
> "Leadership is about articulating visions, embodying values, and creating the environment within which things can be accomplished" (Richards and Engle, 1986, p. 206);
>
> "Leadership is a process of giving purpose (meaningful direction) to collective effort, and causing willing effort to be expended to achieve purpose." (Jacobs and Jaques, 1990, p. 281);
>
> "Leadership is the process of making sense of what people are doing together so that people will understand and be committed."(Drath and Palus, 1994, p. 4);
>
> "Leadership is the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives." (Yukl, 2006, p. 10)

From these definitions, it can be observed that leadership is shifting from directing a group to achieve a task (Hemphill and Coons, 1957) to mobilizing them to see satisfying results (Burns, 1978, Smircich and Morgan, 1982) to envisioning the meanings and values of the goals so that people understand and commit to

accomplishing the shared objectives (Richards and Engle, 1986, Jacobs and Jaques, 1990, Drath and Palus, 1994, Yukl, 2006). The common element in these definitions is that leadership is a process whereby an appointed leader is taking up the role to guide, facilitate and accomplish a goal through a group of people. It is a top-down one-way direction for a leader to exert influence on followers so as to achieve a result. This has been named "Vertical Leadership" in this thesis (Pearce and Conger, 2003b). The vertical leadership research approach has been dominant in the past centuries (Yukl, 2006).

However, in the past decade, a few scholars (Perry et al., 1999, Pearce and Conger, 2003b, Mehra et al., 2006, Carson et al., 2007, Manz et al., 2010) have queried the paradigm and suggested that leadership can also be an activity that is shared among team members within a team or an organization. For example, a team member who is not the formal leader of the group can take up the leadership role when a project specializes in his/her expertise and then step back after the project is completed and let others lead. This practice of shared responsibilities is not only found in the working levels of an organization, but also at the senior executive levels (Heenan and Bennis, 1999, Ensley et al., 2006). The book *Co-Leader: The Power of Great Partnership* (Heenan and Bennis, 1999) pointed to a new way of managing a large corporation through shared effort. Toole, Galbraith, and Lawler (2003) studied many large corporations and found that senior leadership is shared or institutional. For example, Goldman Sachs has a long history of co-CEOs, while the founders of Microsoft and HP are the co-leaders for these companies. This new trend in joint leadership effort was named as shared leadership by Pearce and Conger (2003, p.1). They defined the term shared leadership as:

> "a dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both."

This type of influence process does not rely solely on a single appointed leader to influence the team, but often involves sharing the leadership role within a set of individuals such as peers.

2.3 Contextual drivers for shared leadership

The rise of shared leadership does have a reason. In fact, there are three core reasons: increase in complexity of the work (Lant and Milliken, 1992, Bantel, 1994, Pearce and Conger, 2003b, Day et al., 2004), higher customer expectations for speed and service (Bell and Zemke, 1988, Bitner et al., 1990, Heskett et al., 1994, Perry et al., 1999), and uplifted knowledge workers seeking more autonomy at work (Manz and Sims, 1987, Taggar et al., 1999, Wolff et al., 2002). The following paragraphs will explain these situations in detail.

2.3.1 Complexity of the work

Today's complex and ambiguous working environments require various types of expertise to deal with situations in which one person is very difficult to handle (Day et al., 2004, Pearce, 2004). This has led to the need for more shared responsibilities and knowledge among senior to middle level leaders to perform all necessary leadership functions collectively. Sometimes, in the fast changing and complex marketplace, the leaders in the top positions may not have enough or relevant information to make effective decisions. Often, the managers down the line may possess more appropriate information for decision making and leading the teams (Pearce and Conger, 2003b).

Bantel (1994) concluded, from her research on retail banks, that the functional background diversity of the top management team was associated positively with strategic planning openness. In addition, Lant and Milliken (1992) found that, in both software and furniture industries, functional diversity of the management team was related positively to strategic re-orientation. Therefore, the variety of perspectives and

capabilities of the management team can help to generate more information and more extensive analysis of the situation for better decision making in this complex environment. Sharing of information, decision making and leadership have all been observed as important.

2.3.2 Customer expectation

When supply is more than demand and competition is strong, a company has to raise its service level and speed of responses to customers' enquiries. Heskett and his colleagues (1994) described a service-profit chain that illustrated how the job design and employee development, rewards and recognition could improve employee satisfaction, then customer satisfaction and loyalty and, as a result, improve the profitability and revenue of the company.

A delay or unacknowledged reply from the frontline staff may cause the loss of a client (Perry et al., 1999). Clients' perceptions can be influenced by the staff responses to the clients, their knowledge about the services and products, and their outlook. Therefore, in order to meet clients' expectations, the frontline staff members have to be knowledgeable and empowered with authority to make decisions when the leader is not around (Bitner et al., 1990, Bell and Zemke, 1988). This supports the sharing of responsibilities and leadership roles within a team.

2.3.3 Knowledge workers seek more autonomy

Self-managing teams are well established and rooted in U.S. industry (Manz and Sims, 1987). This form of team relies on the leadership originated within itself, instead of someone assigned by the company. Workers in these teams are knowledgeable and skillful in handling their assignments. They would like to seek more autonomy in dealing with their jobs and more opportunities in shaping and participating in the leadership roles for their teams, hence shared leadership occurs naturally (Wolff et al., 2002). Taggar, Hackett and Saha (1999) found that more effective leadership emerged

when the staff members were able to compensate for each other's shortcomings, and particularly for those of the worst member. Therefore the encouragement of more shared form of leadership in the team can uplift the team performance.

With increases in job complexity, higher demands from customers, and more and more knowledgeable workers, the trend of shared leadership has emerged. The next section will explore the historical development of this new type of leadership in teams and organizations.

2.4 **Historical development of shared leadership**

Despite the emphasis on vertical leadership research in the past century, alternative perspectives were also observed in the early 20th century, albeit briefly. The law of situation was introduced by Mary Parker Follett in 1924 (Pearce and Conger, 2003a). This pointed to the possibility of shared leadership. Follett suggested that the person who is the most knowledgeable in a particular situation should take the lead, rather than the appointed leader. However, when the norm is still focusing on management taking absolute command and control of the workers, Follet's concept cannot be adopted. Workers can only listen to and follow orders; no workers can shape or influence the actions and decisions of the management. Therefore her idea came and went without much attention.

Another concept close to shared leadership was described in a study by Bowers and Seashore (1966), investigating agencies of a life insurance company in regard to the impact of supervisory and peer leadership on the outcomes of satisfaction and factorial performance measures. They found that both supervisory and peer leadership processes were related positively to organizational outcomes. This demonstrates the early concept of shared leadership, that team members can take up leadership behaviors as a team, not purely from the appointed leader.

Peer leadership models like that of Follett, Bowers and Seashore have not flourished. Later, between 1970 and 2000, some scholars developed several theories that paved the theoretical groundwork of shared leadership. These were participative decision making, substitutes for leadership, self leadership and SuperLeadership, and self managing work teams. This section will describe these theories in detail.

2.4.1 Participative decision making

When the main stream is to follow the decisions made by an authoritative leader, the decision procedures carried out by a leader affects the acceptance by his/her people who are going to execute the decision and the quality of the outcome (Vroom and Yetton, 1973). Vroom and Yetton identified five decision procedures, from purely autocratic decision making where subordinates have no influence, to joint decision-making where subordinates' ideas and comments are incorporated to form the solution most preferred by the entire group. The joint decision approach is preferred in conditions where decision acceptance by the subordinates is important for implementing the decision; subordinates have more relevant information to augment the decision making, and low potential for internal conflict. This approach is the cornerstone for establishing a shared form of leadership within a team. It helps to identify some conditions where shared and collaborative decision making styles are likely to be more effective than the autocratic form of vertical leadership.

2.4.2 Substitutes for leadership

The substitutes for leadership model (Kerr and Jermier, 1978) identified certain conditions, including that the leadership exerted by the formal leader can be substituted or neutralized by the subordinates, work design, organizational structure, or reward systems. These substitutes make the leader's effort redundant and the neutralizers nullify the effect of the leader's actions. For example, highly experienced and professional staff with ample knowledge about how to fulfill their jobs can substitute

for the direction and supervision of the leader. Professionals, such as nurses, accountants, social workers, and others who are intrinsically motivated by the values and contributions of their work do not need encouragement or supervision from their bosses as well. As such, this theory provides a wider and systematic perspective on leadership processes, which can be influenced by subordinates, task and organizational characteristics of a group, and grounds the framework of shared leadership.

2.4.3 Self leadership and SuperLeadership

Self leadership has been identified to be a substitute for formal leadership (Manz and Sims Jr, 1980) and is defined as "the influence we exert on ourselves to achieve the self-motivation and self direction we need to perform." (Manz and Sims Jr, 1991). Manz and Sims viewed true leadership as originating within a person, not from outside. External leadership is only a facilitator or encourager to unleash the potential and energy of leadership from within.

In the self leadership concept, two sets of strategies, behavioral and cognitive strategies, are used to enhance the performance outcomes. Behavioral strategies focus on actions that can help to manage our work more effectively. Specific actions include self-observation, self-goal setting, management of cues, rehearsal, self-reward, and self-punishment or self-criticism (Manz and Sims Jr, 1991). Cognitive strategies focus on promoting our effective thinking through self-redesigning our jobs to become more naturally rewarding and establishing a positive and effective pattern of thoughts. The behavioral strategies make us experience more enjoyment by allowing us to experience a sense of competence, self-control, and purpose with our jobs. The cognitive strategies help us search for opportunities rather than obstacles embedded in our challenges.

When the subordinates understand the organization objectives, with the relevant skills to work towards the objectives, and have self motivation to exert the effort to accomplish the results, then the formal leader's supervision and control can be reduced.

As a result, the subordinates are leading themselves without the presence of the leader. This is viewed as the heart of creating shared leadership, where team members are willing and capable of taking up more shared leadership responsibilities in their teams (Houghton and Neck, 2003).

To complement self leadership, the appointed leader can take up the primary responsibility of empowering and developing self-leadership skills in his team members. This has been referred to as SuperLeadership (Houghton and Neck, 2003, Manz and Sims Jr, 1991), which is a process of leading others to lead themselves. Contrary to the traditional heroic leadership emphasis on commands and authority, SuperLeadership focuses largely on unleashing self-leadership abilities and uses shared types of power to accomplish shared goals within the team.

Self-leadership and SuperLeadership together serve as the core elements in developing and cultivating the team members' capability and eagerness to share the leadership role and processes within the team.

2.4.4 Self managing work teams

The idea of self-managing work teams arose primarily from socio-technical systems theory. This theory designs the organizational structure in order to improve productivity and human interaction for standardized work groups (Cummings, 1978, Stewart and Manz, 1995). Production systems are classified into two parts: technological and social. The technological part is comprised of the required tools, machines and methods to turn raw materials into final products. The social part consists of a work structure design that ties workers together as well as creating ties between people and the technological part to produce the required products and services. This design is targeted to improve the productivity of the production process and the satisfaction of the work groups. It starts to pay attention to employees' social and psychological needs for more autonomy and social interaction, instead of a division-of-labor work design which focuses on meeting

the task demands of a mechanized assembly-line with directive commands and isolated relationships among workers.

The work design of a self-managing work team normally considers the complete task and final objective of the team. Each member in the team possesses various capabilities for fulfilling the task. When members group together, they can achieve the assigned objectives collectively. These members are granted the discretion to make decisions related to the accomplishment of the task, such as scheduling, job assignment to the members, and methods for completing the task. Through this type of work design, shared leadership among team members has been observed to be effective in coordinating and facilitating the team to achieve the designated objectives. The role of the appointed leader is to serve as a coach, facilitator or consultant to the team (Manz and Sims, 1987, Druskat and Wheeler, 2003, Yukl, 2006). The appointed leader is important for building the team members' skills and confidence, acquiring the necessary resources and political support from the organization, managing boundaries with external parties, and communicating clear expectations for the team.

Many empirical studies of self-managed work teams have supported the contribution of this type of team to improving the work group's performance effectiveness, more specifically the quality, productivity, and cost savings (Stewart et al., 2011). Staff turnover and absenteeism have been found to be reduced greatly as well.

2.4.5 Conclusion

By reviewing the theories on participative decision making, substitutes for leadership, self-leadership and SuperLeadership, and self managed work teams, a trend in sharing the leadership among team members can be observed. Increasing the autonomy and responsibilities of the workers can enhance their intrinsic motivation to complete the task in a better way. They proactively suggest solutions to problems and create ideas to

improve the work efficiency and cooperation among team members. These theories set the foundation for a shared mode of leadership to be developed.

Pearce and Conger (2003b) reviewed a broad range of literature on shared leadership in their book "Shared Leadership: Reframing the Hows and Whys of Leadership." This signaled the growing interested in this topic by recent scholars. Nevertheless, in the last chapter of their book, they mention that this concept is underdeveloped and that very few studies have been implemented (Pearce and Conger, 2003b, p. 296). Therefore there are ample opportunities for the study of shared leadership. Conger and Pearce (2003, p.301) mentioned: "As readers will have realized by now, the field of shared leadership holds remarkable opportunities for researchers in the future. There is so little that we actually know --- to use an old truism, 'We have only scratched the surface.'" They further explain "shared leadership is, after all, still a relatively 'primitive term'" (Pearce et al., 2008) after a few years. More empirical studies are required to find the relation of shared leadership and team performance and effectiveness.

2.5 **Types of Leadership in a team**

From the last section, clearly there is a peer collaborative influence and leadership within a team to achieve a designated objective. Therefore, according to Yukl's (2006, p.10) definition of leadership:

> "Leadership is the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives."

It has been explained earlier in this thesis that here are two possible sources of team leaders who can influence and facilitate others to accomplish shared objectives (Ensley et al., 2006). The first one is the vertical leader who is assigned to lead the team – Vertical Leadership. The other one is the team members who collaboratively support and lead each other within the team context – Shared Leadership.

2.5.1 Shared leadership

In this complex and fast changing environment, it is impossible for one single individual, the formal leader, to possess all the necessary competencies to deal with team management. In reality, the formal leader normally has certain strengths but shows weaknesses in other areas. Team members, as a whole, can carry a wider variety of functional skills and leadership competencies compared to the formally assigned leader. Therefore it is very sensible to take advantage of the team members' strengths to complement the appointed leader's shortfall or to free the leader's time for different work such as team building, boundary management with external parties outside the team, and staff training and development (O'Toole et al., 2003). Team performance can be optimized when leadership roles and processes are distributed among the team members.

For this purpose, Burke, Fiore and Salas (2003, p. 105) defined shared leadership as "the transference of the leadership function among team members in order to take advantage of members' strengths (e.g. knowledge, skills, attitudes, perspectives, contacts, and time available) as dictated by either environmental demands or the developmental stage of the team." For example, a task-oriented leader may be too focused on generating results, and this can create tension within the team. It is very hard for him to take up the social supportive role to soothe the tension at the same time. Therefore, it may be more effective to have a second person who can provide encouragement and emotional support to the team to ease the tension and encourage the team to work cooperatively.

The importance of shared leadership for team performance and effectiveness has been identified in many research studies (Carson et al., 2007, Hoch et al., 2010, Small and Rentsch, 2010). Carson et al. (2007) studied 59 consulting teams of MBA students and found that the degree of shared leadership in a team is related positively to team performance. The same result was observed in a study of junior- and senior-level business majors enrolled in a core business course at a large public university in the

United States (Small and Rentsch, 2010). Even in Germany, with a culture of lower individualism and lower power distance compared to the United States (Hofstede, 1980a), shared leadership has been found to be related positively to team performance in a study of 26 project teams in a German consulting company (Hoch et al., 2010).

Qualitative research in the healthcare sectors has shown significant contributions from the application of shared leadership in organizations. The Education Department of a hospital in the United States (Williams et al., 2002) implemented a shared leadership approach named Nurse Residency Program for new nurses in the intensive care unit and successfully lowered the turnover rate and increased the satisfaction significantly. Another study, in the Aurora Health Care Center in Eastern Wisconsin (George et al., 2002), demonstrated that the implementation of shared leadership with nursing staff increased the application of leadership behaviors, professional nursing practice autonomy, and enhancement in patient, personal and workplace outcomes.

Hooker and Csikszentmihalyi (2003) found, in a qualitative study, that shared leadership stimulated flow and creativity in the space science laboratory and resulted in more effective knowledge shared among the work group. In addition, the strategic commitment of sustaining shared leadership helped Herman Miller Inc., a leading business furniture innovator and manufacturer, to overcome the Great Depression and dotcom meltdown, to have continuously outperformed S&P 500 since 1990 (Manz et al., 2010).

Merkens and Spencer (1998) predicted that shared leadership would become the CEO's core survival strategy: "Twenty years ago, or even ten, the sharing of leadership and responsibility would have been advantageous to an organization. Today it is critical to survival. Without it, the CEO, and possibly the whole organization, is headed for failure."

All the above studies have supported the notion that shared leadership is important for team performance and effectiveness in the United States and Europe. Does the result apply to an Asian city like Hong Kong? To explore this, the first research question in this thesis was: Does shared leadership have a positive impact on team effectiveness in Hong Kong?

2.5.2 Vertical leadership

While the literature reviewed in the previous section supports shared leadership, it is not clear whether shared leadership alone can determine team outcomes. Cox, Pearce and Perry (2003) argued that shared leadership supplements but does not replace vertical leadership completely. Locke (2003) agreed that "shared leadership is not, by itself, a solution to this problem but rather a tool that an able leader will use among others, to accomplish the tasks that leadership requires." Both Cox et al. and Locke claimed that leaders have a role to support and foster the development and maintenance of shared leadership. Houghton et al. (2003, p. 125), suggested that "the vertical leader should empower team members by providing the team with the full authority to make decisions, solve problems, set objectives, and develop and pursue appropriate courses of action." Locke (2003) argued that some key tasks of the Chief Executive Officer (CEO) should not be shared. These include establishing the vision and core values of the company, choosing the members of the top management team, appraising the top managers, and structuring and restructuring the organization. Some functions, on the other hand, can be shared, at least in part: motivation, team building, information sharing between levels, and delegation downward to the next level staff. The selection and training of lower level staff can also be delegated. When the staff members are committed to the organization's vision, core values and goals, there can be more empowerment and delegation with regard to decision making, problem solving, objective setting, and action persuasion. Without commitment, team empowerment seems meaningless.

From the review of this perspective, it seems that vertical leadership is an important predictor of team effectiveness in western countries. To find out whether this is also the case in an Asian country, the second research question in this thesis was: Does vertical leadership have a positive impact on team effectiveness in Hong Kong?

2.5.3 Shared versus vertical leadership

Locke (2003), instead of focusing on either one type of leadership, proposed an integrated model to describe the ideal leadership. In his model, there should be communication in three directions: 1) top down from the leader; 2) upward influence from the bottom; 3) peer sharing and collaboration to influence each other on the process and outcomes. As a result, there are roles for the leader as well as the team members of an organization. Therefore both vertical and shared leadership should play a role in team performance and outcomes.

Shared leadership has been found to be significant and important in predicting team effectiveness in many empirical studies (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006, Carson et al., 2007, Hoch et al., 2010, Manz et al., 2010, Small and Rentsch, 2010). However, the importance and contribution of vertical leadership have not always been supported. Some empirical studies have shown that vertical leadership is not significant (Pearce et al., 2004) or is less important than shared leadership (Pearce and Sims, 2002, Ensley et al., 2006) in predicting team or organization effectiveness.

Pearce and Sims (2002) investigated vertical versus shared leadership as predictors of the effectiveness of 71 change management teams in an automotive manufacturing firm in mid-Atlantic United States. Both vertical and shared leadership were found to play an important role in predicting team effectiveness, but shared leadership was demonstrated to be more useful and significant.

Similar results were obtained by Ensley et al. (2006) in their study of the relative influence of vertical versus shared leadership in new venture top management teams on the performance of startups. “Shared leadership within the new venture top management team accounts for a significant amount of variance in new venture performance above and beyond that which are accounted for by vertical leadership of the new venture top management team leader.”

In another study, of the relative influence of vertical versus shared leadership in virtual teams of social workers studying an educational program in the United States, Pearce et al. (2004) found no statistical significant support for vertical leadership as a predictor of any measures of the team outcomes. In contrast, shared leadership was related significantly to many of these team outcomes. As a result, they concluded that shared leadership was more important than vertical leadership in the virtual social worker teams in the study program.

From these three studies, it appears that shared leadership plays a more significant role than vertical leadership in predicting team outcomes or effectiveness. To explore this in the Hong Kong context, the third research question was: Is shared leadership a more important predictor of team effectiveness than vertical leadership in Hong Kong?

2.6 **Research questions**

In summary, the research questions for this research were:

1. Does shared leadership have a positive impact on team effectiveness in Hong Kong?
2. Does vertical leadership have a positive impact on team effectiveness in Hong Kong?
3. Is shared leadership a more important predictor of team effectiveness than vertical leadership in Hong Kong?

2.7 Measure of leadership behaviors

The measure of leadership behaviors was adopted from the instrument developed by Pearce, Sims, Cox, Ball, Schnell, Smith and Trevino (2003), which was also used by Ensley et al. (2006), Pearce et al. (2004), and Pearce and Sims (2002) for studying the importance of vertical and shared leaderships in new venture top management teams, social worker virtual teams, and change management teams respectively in the United States. Both vertical and shared leadership behaviors were measured by this set of behaviors. This parallel measurement method was used by Ensley et al. (2006), Pearce et al. (2004), and Pearce and Sims (2002) as well.

The following paragraphs present the trend in measuring leadership behaviors, the reason for selecting the Pearce et al. (2003) measure, and the detailed description of this measure.

2.7.1 Development of leadership behaviors measurement

Over the past decades, the measures of managerial behaviors changed due to changes in economics, politics, and society of the business environment (Dess and Picken, 2000). For example, Coffin (1944) proposed a three-component theory of leadership focusing on planning, organizing and persuading functions in line with the directing needs of leadership at that time. A few years later, Fleishman (1953) classified supervisor behaviors into two broad categories, “consideration” and “initiating structure”. Consideration involves the supporting and friendly manner of the supervisor towards the feelings and needs of the subordinates, while initiating structure is concerned with defining and structuring the team in order to accomplish the task. During the 1950s to the mid-1980s, most of the research was dominated by these two categories in relation to task accomplishment and relationship (Yukl, 2006).

A lot of classification systems or taxonomies of leadership behaviors have been proposed in the past century. Just between 1944 and1986, there were as many as 65

types of leadership behavior classifications, as listed by Fleishman et al. (1991). With the understanding that this is still not exhaustive, and with some more categories having been developed in recent years, one can imagine the complexity and variety in classifying and measuring leadership behaviors.

Since the dimensions of leadership behaviors have been modified and updated according to changes in the environment and organization structures, it was considered reasonable to select one that was developed recently, with broad consideration of a wide variety of historical theories. In this research, the theoretical typology of leadership behaviors developed by Pearce et al. (2003) was used. This typology tries to include multiple theoretical and empirical work of previous leadership studies instead of discarding or discounting them (Pearce and Sims, 2002). After a full-scale validation study of the measures, a theoretical model with four types of leadership behaviors was found to have strong psychometric properties (Pearce et al., 2003). This model extended the popular transactional and transformational leader behaviors (Bass, 1985b, Avolio et al., 1999) with directive and empowering leadership behaviors.

The following subsection will explain this model in detail.

2.7.2 Pearce and colleagues' (2003) leadership behaviors measurement model

Pearce et al. (2003) built their model by first analyzing a broad array of past leadership literature and listing a set of leadership behaviors. They then deductively proposed a theoretical leadership behavior model classifying this set of leader behaviors into four core leadership types: directive, transactional, transformational, and empowering. Each of these leadership behavior types was rooted in several historical theories and researches related to leadership behaviors. Table 2-1 is extracted from their articles on the "theoretical and research bases of the historically derived model of leadership types."

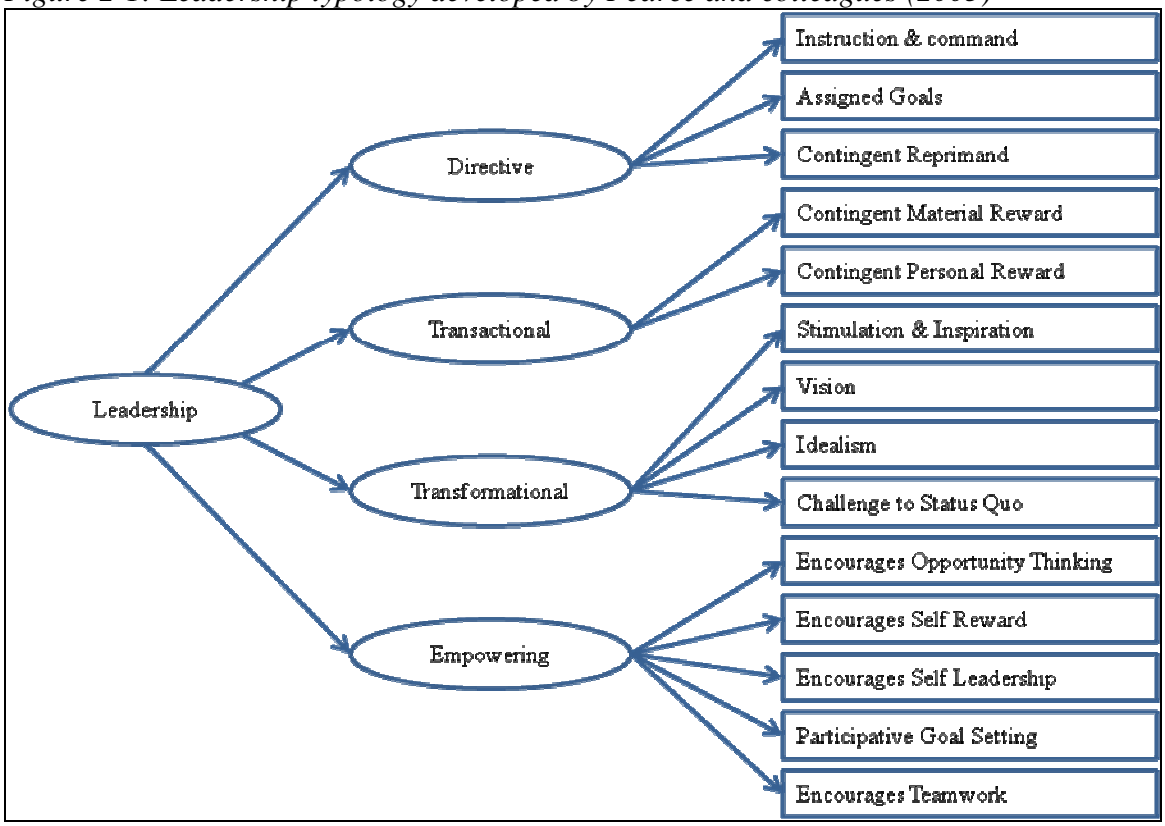
Table 2-1: Theoretical and research bases of the historically derived model of leadership types (extracted from Pearce et al., 2003, p.276)

Leadership type	**Theoretical and research bases**
Directive leadership	• Theory X leadership (McGregor, 1960) • Initiating structure from Ohio State studies (e.g. Fleishman, 1953) • Task-oriented behavior from Michigan studies (e.g. Katz, Maccoby, and Morse, 1950) • Punishment research (e.g. Arvey and Ivancevitch, 1980)
Transactional leadership	• Expectancy theory (e.g. Vroom, 1964) • Path-goal theory (e.g. House, 1971) • Equity theory (e.g. Adams, 1963) • Exchange theory (e.g. Homans, 1961) • Reinforcement theory (e.g. Luthans and Kreitner, 1985; Sims, 1977; Thorndiske, 1911) • Reward research (Podskoff et al., 1982)
Transformational leadership	• Sociology of charisma (e.g. Weber, 1946) • Charismatic leadership theory (e.g. House, 1977) • Transformational leadership (e.g. Bass, 1985; Burns, 1978)
Empowering leadership	• Behavior self-management (e.g. Thorenson and Mahoney, 1974) • Social cognitive theory (e.g. Bandura, 1986) • Cognitive behavior modification (e.g. Meichenbaum, 1977) • Participative management and participative goal setting research (e.g. Likert, 1961, 1967; Locke and Latham, 1990)

Second, they tested the leadership behavioral set empirically with two independent data sets from two different studies, using exploratory factor analytic (EFA) techniques. Inductively, they generated alternative plausible models to group the leadership behavioral set. Finally, they used a third independent data set to find the best fit model to explain the structure of the leadership behaviors by confirmatory factor analytic (CFA) techniques.

Their results showed clearly a model consisting of four behavioral types of leadership that were the best fit to the data. These behavioral types include directive, transactional, transformational, and empowering leadership behaviors. Their respective behaviors are presented in Figure 2-1. The following paragraphs will describe these four leadership behaviors, along with their core historical development, in detail.

Figure 2-1: Leadership typology developed by Pearce and colleagues (2003)



2.7.2.1 Directive leadership behavior

The first leadership type is directive leadership behavior, which mainly involves planning, instructing and monitoring staff to accomplish a result (Yukl, 2006). This behavioral type of leadership originated from the Theory X management style (McGregor, 1960), initiating structured groupings in the Ohio State studies (Fleishman, 1953, in Yukl, 2006), and the task-oriented behavior style in the Michigan leadership studies (Katz, Maccoby, Gurin & Floor, 1950, in Yukl, 2006). Theory X management style focuses on exerting instructions and control over subordinates, while the Ohio State and Michigan studies include planning, organizing, coordinating, and assigning jobs to the subordinates according to the specific goal.

Pearce and his colleagues (2003, p.299) found the directive leadership behavior type to consist of three behavioral sets:

1) issuing instructions and commands;

2) assigning goals; and

3) contingent reprimand.

2.7.2.2 Transactional leadership behavior

The second behavioral type in the Pearce et al. (2003) typology is transactional leadership behavior, which includes both contingent material reward and contingent personal reward in exchange for the team member's performance, and is in line with the transactional leadership theory presented by Burns (1978) and Bass (1985a). The development of transactional leadership behaviors is based on expectancy theory (Vroom, 1964), exchange theory (Homans, 1958, Homans, 1974), and reinforcement theory (Pearce et al., 2003).

Expectancy theory (Vroom, 1964) describes a cognitive-rational choice made by an individual when putting in effort to achieve a designated outcome according to three perspectives: the desirability of the potential outcome, the perceived probability of the outcome and the likelihood of success when putting in certain effort. The key motivation factor for engaging the individual is an effort-reward based relationship, so that the individual will decide the level of effort required in order to achieve the reward.

Another cognitive-rational model that transactional leadership behavior builds on is exchange theory (Homans, 1958, Homans, 1974). Under this theory, individuals are concerned that what they get and give from an exchange is comparable to what others get and give. If the benefits and efforts in these exchanges are inequitable between them, they tend to rectify until a balance is obtain. This exchange is not limited to material favors, but also includes psychological benefits such as expressions of appreciation, approval, respect, and affection. Therefore the prescription to motivate subordinate performance is offering equitable rewards for efforts contributed.

“Reinforcement theory is summarized by the law of effect, which suggests that the consequence of a behavior is an important determinant of whether the behavior will be repeated.” (Luthans and Kreitner, 1985 in Pearce et al., 2003). This means that if the leader rewards certain behaviors, subordinates will do them repeatedly in order to get the reward, and these behaviors are reinforced.

In summary, the transactional leadership behavioral set in the Pearce et al. (2003, p.299) model is

1) dispensing contingent material rewards; and
2) dispensing contingent personal rewards.

2.7.2.3 Transformational leadership behavior

Transformational leadership behavioral type emphasizes the development and communication of vision to inspire and stimulate the followers (Bass, 1985a) and is influenced strongly by the idea of charisma, a Geek word meaning “divinely inspired gift”, initiated by the sociologist Max Weber in 1947 (in Yukl, 2006). The influence of subordinates by charisma is not through formal authority or contingent rewards. On the other hand, it is through the exertion of radical vision and solution to a social crisis by an extraordinarily gifted leader. The followers believe in this vision and, when it turns out to be successful repeatedly, they come to perceive the leader as extraordinary and are willing to obey and follow this leader.

Charismatic leadership sets the foundation for the development of the transformational leadership behavioral type but not necessarily in a crisis condition. Transformational leadership behavior can be observed at any level and in any organization in which followers feel trust, regard, loyalty and affection toward the bosses. Followers are motivated to achieve above expectations. Instead of focusing on self-interested rewards, they are more aroused to the higher level accomplishment of the organization. The core behaviors of transformational leadership were described by Bass and Avolio (1993):

1) Idealized influence: the ability to arouse strong emotion and identification with leader.
2) Individually considerate: the leader pays close attention to developing the followers' capabilities through coaching, encouragement, and feedback so that they are confident to take up more and harder responsibilities.
3) Intellectually stimulating: the leader encourages the followers to view the old problems from new perspectives and fosters creativity to solve them.
4) Inspirational motivation: the leader is able to articulate an appealing vision and stimulate followers to act on it.

Pearce's and his colleagues' (2003, p.299) model of transformational behavioral set is close to that of Bass and Avolio, and includes:

1) providing a sense of vision;
2) challenging the status quo;
3) engaging in idealism; and
4) providing stimulation and inspiration.

2.7.2.4 Empowering Leadership behavior

The last behavioral type is empowering leadership behavior, which places emphasis on full delegation to subordinates through developing their self-management or self-leadership skills. This leadership behavioral type is based on behavioral self-management (Manz and Sims Jr, 1980, Manz and Sims Jr, 1991), social cognitive theory (Wood and Bandura, 1989), and participative goal setting research (Erez and Arad, 1986).

Behavioral self-management originated from clinical psychology and was expanded by Manz and Sims (1980) for the business-management arena. They used the terms "self-leadership" for the subordinates and "SuperLeadership" skill for the leader (refer to section 2.4.3. of this thesis for a more detailed explanation). Self-leadership can

substitute the formal leader's roles and responsibilities if the subordinates can practice and manage several self-controlled behaviors including self-observation, self-goal setting, management of cues, rehearsal, self-reward, and self-punishment or self-criticism (Manz and Sims Jr, 1991).

Social cognitive theory explains psychosocial functioning in terms of triadic reciprocal causation (Wood and Bandura, 1989); this means that an individual with certain personal factors such as cognition and affect can influence his/her environment through his/her behaviors, and in return, these behaviors and environment can influence the individual. This has a key contribution to illustrating the modeling effect in empowering leadership. If a leader demonstrates self-leadership behaviors, these will subsequently be adopted by the subordinates. Therefore the leader establishes a model for the subordinates to follow and, as a result, establishes the culture and environment for empowering leadership.

The third historical contribution to empowering leadership behavior is participative goal setting. Participation has been conceived as "group discussion leading to a decision" in the conventional studies (Erez and Arad, 1986). Through involving the team members in discussion, information sharing, and decision making, this participative goal setting helps to increase the decision quality and acceptance, as well as the satisfaction and skill development of the members. Many studies have supported this relationship, but some others have not (Yukl, 2006). Pearce et al. (2003) wondered whether participative goal setting should be put under transactional leadership behavior or be omitted from their plausible model formation process, but finally, after testing, put it under empowering leadership behavior (Pearce et al., 2003).

In conclusion, the behavioral set under the empowering leadership type is (Pearce et al., 2003, p.300):

1) encouraging opportunity thinking;
2) encouraging self-rewards;

3) encouraging self-leadership;
4) engaging in participative goal setting; and
5) encouraging teamwork.

As both vertical leader and team members can exert influence on the team effectiveness via these four types of leadership behaviors, vertical and shared leadership can be measured by this instrument.

2.8 **Measure of team effectiveness**

There is no consensus about the selection of measures for selling team effectiveness (Sujan et al., 1994, Perry et al., 1999). It can be based on objective quantitative elements such as sales volume, profitability, new customer acquisition, or staff turnover rate. Nevertheless, these elements may be affected by many external factors, including the economic situation, the employment situation, customer demands, geographic locations of different shops, and competitors' orientations. It may not be reliable for a one-shot study. The alternative measurement is through subjective qualitative measures such as self-ratings, manager ratings and customer ratings of team effectiveness. This, however, should not be viewed as a simple, unidimensional construct (Ancona and Caldwell, 1992). Ancona and Caldwell suggested the measurement should be both fine-grained and related to the task, not on a generalized term such as satisfaction. In addition, different stakeholders may evaluate a group's performance differently. Therefore it has been recommended to rate the performance from various parties (Tsui, 1984, Gladstein, 1984).

In conclusion, this research used quantitative ratings from the frontline sales staff and shop management to evaluate their respective shop effectiveness. Both groups responded to the team effectiveness questionnaire adopted from Pearce and Sims (2002), which is an integration of performance and effective measures from Ancora and Caldwell (1992), Manz and Sims (1987) and Cox (1994 in Pearce and Sims, 2002). This

questionnaire assesses team effectiveness in seven dimensions (Table 2-2): output effectiveness, quality effectiveness, change effectiveness, organizing and planning effectiveness, interpersonal effectiveness, value effectiveness and overall effectiveness.

Table 2-2: Dimensions in measuring team effectiveness (Pearce and Sims, 2002)

Seven dimensions in measuring team effectiveness
1) Output effectiveness
2) Quality effectiveness
3) Change effectiveness
4) Organizing the planning effectiveness
5) Interpersonal effectiveness
6) Value effectiveness
7) Overall effectiveness

2.9 **Control variable: Team size**

Team size was used as a control variable in this research. As team size increases, the collective capabilities and strengths of the team will increase. However, to a certain level, the size of the team may cause difficulties in team communication and interaction. Several studies have shown that, as the team size becomes larger, the communication among team members is more difficult, participation is less and, as a result, there is less cooperation. Therefore team size may have a negative effect on the team's effectiveness (Albanese and Van Fleet, 1985, Gooding and Wagner, 1985, Campion et al., 1993, Baugh and Graen, 1997).

Gooding and Wagner (1985) studied a meta-review of 31 published field studies about the team size and performance relationship and found that the relationship between sub-unit size and team performance was zero to moderately negatively. They reported that, as the team size increased, it became more difficult to manage team interaction processes as consensus and communication among team members became more

difficult. Teams become less cooperative and less integrated when size increases (Markham et al., 1982, Pinto, 1982, Kerr, 1989). Free-rider behaviors will be more obvious with more members in the team, but it is harder to locate the free rider (Albanese and Van Fleet, 1985). Members in large groups tend to remain low key as their contributions are less perceptible and the share of public good will diminishes as team size increase. Based on these findings, it was anticipated that team size might influence the exertion of both vertical and shared leadership and team effectiveness, hence it was included in this study as a control variable.

2.10 **Hypotheses development**

In order to answer the research questions, three hypotheses were developed.

2.10.1 Vertical leadership

The contribution of vertical leadership to team effectiveness has been studied by numerous researchers and found to be influential (Merkens and Spencer, 1998, Jackson, 2000, Pearce and Sims, 2002, Williams et al., 2002, Ensley et al., 2006, Yukl, 2006, Manz et al., 2010). In quantitative studies, Ensley et al. (2006) and Pearce and Sims (2002) found positively significant relationships between vertical leadership and new venture top management teams and change management teams respectively. In qualitative studies, Manz et al. (2010), Williams et al. (2002), Jackson (2000), and Merkens and Spencer (1998) found that vertical leadership is important in supporting various team functions, such as building team structure, nurturing relationships, commissioning resources, empowering decision making, educating and coaching staff, valuing staff contributions, building trust and commitment in staff, forming a shared culture, and many other functions. Nevertheless, one study by Pearce et al. (2004) found that vertical leadership was not significant to team outcomes in social work virtual teams. In summary, vertical leadership is an important construct for team performance and effectiveness (Cox et al., 2003, Locke, 2003).

The next question is in what form and process this should occur. When a vertical leader is appointed to manage a team, he or she has to apply various leadership behaviors in order to suite different contexts and staff, to obtain high team effectiveness. Therefore "effective leaders need to have a full range of leader behaviors to draw from" (Hargis et al., 2011, p. 61). To match this requirement, the Pearce et al. (2003) leadership typology, including directive, transactional, transformational and empowering behaviors, was adopted in this research to study the impact of vertical leadership on team effectiveness. This typology was selected because of its inclusion of multiple theoretical and empirical works from leadership previous studies and its full-scale validation approach. A detailed discussion is written in section 2.7 of this thesis. These four types of leadership behaviors have been cited in many previous studies as important factors for measuring leadership (Lowe et al., 1996, Judge and Piccolo, 2004, Judge et al., 2004, Ahearne et al., 2005, Burke et al., 2006, Hargis et al., 2011).

In the past, many researchers studied the impact of transformational-transactional leadership behaviors on team performance, effectiveness or productivity. Most of these studies showed positive relationships for transformational leadership (Lowe et al., 1996, Judge and Piccolo, 2004, Burke et al., 2006, Hargis et al., 2011). Lower et al (1996) performed a meta-analysis of the transformational leadership literature and found that transformational leadership, in terms of charisma, individualized consideration and intellectual stimulation, was associated positively with work unit effectiveness, irrespective of whether it occurred in public or private sectors or higher or lower management teams. Judge and Piccolo (2004) considered 626 correlations from 87 studies and concluded that transformational leadership had an overall validity of 0.44 for team performance. Therefore, the majority of the past studies support the vision, inspiration and charisma of transformational leadership as the motivational force for achieving team performance and effectiveness.

Similar results have been obtained for transactional leadership (Lowe et al., 1996, Judge and Piccolo, 2004, Hargis et al., 2011). Contingency rewards are highly valid in

improving subordinates' job satisfaction and group performance (Judge and Piccolo, 2004) and work unit effectiveness (Lowe et al., 1996). Transactional leadership was found to be a salient behavior in achieving actual task performance (Hargis et al., 2011). Nevertheless, occasionally, non-significant results were obtained (Burke et al., 2006). In general, according to Lowe et al's (1996) and Judge and Piccolo's (2004) meta-analyses of transformational and transactional research, both have positive relationships with work unit effectiveness, but that of transformational leadership is higher. Nevertheless, for several criteria, contingent reward has a higher relationship with performance than transformational leadership (Judge and Piccolo, 2004). Therefore, transactional leadership with contingent rewards, both materials and personal, is considered to impact positively on team performance and effectiveness.

Encouraging more participation in empowering leadership has also been related positively to team effectiveness (Erez and Arad, 1986, Cotton et al., 1988, Ahearne et al., 2005, Srivastava et al., 2006). Team members' participation can increase the performance quality, incidental learning, goal acceptance, group commitment and satisfaction (Erez & Arad, 1986). Srivastava et al (2006) studied hotel management teams and found that empowering leadership was related to knowledge sharing and team efficacy, which in turn was related indirectly to performance. Another study of sales teams in the pharmaceutical field showed that empowering leadership was related positively to sales performance (Ahearne et al., 2005). This was found to be especially beneficial for the sales teams with low levels of product/industry knowledge and low experience. As a result, it can be hypothesized that empowering leadership is also related positively to team effectiveness.

The advantage of clear direction and goals in directive leadership has also been shown to have a positive influence on team performance and effectiveness (Muczyk and Reimann, 1987, Judge et al., 2004, Burke et al., 2006, DeRue et al., 2010). In Burke et al.'s (2006) meta-analysis of 17 studies and 1242 teams, the relationship between the use of initiating structure and perceptions of team effectiveness was supported.

Similarly, a positive relationship was found in Judge et al.'s (2004) meta-analysis of 159 correlations between initiating structure and group-organization performance. Therefore it can be hypothesized that directive leadership is related positively to team effectiveness.

According to the review of past research, all directive, transactional, transformational, and empowering leadership behaviors in the Pearce et al. (2003) leadership typology should have positive impacts on vertical leadership. Therefore the first hypothesis in this study was proposed to be:

Hypothesis 1:
Vertical leadership will be related positively to team effectiveness, such that the more directive, transactional, transformational and empowering the shop management behaviors are, the higher the team effectiveness in the shop will be.

2.10.2 Shared leadership

Similar to vertical leadership, shared leadership was found to influence team effectiveness positively, both in qualitative studies (Merkens and Spencer, 1998, Jackson, 2000, Williams et al., 2002, Manz et al., 2010) and quantitative research (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006, Carson et al., 2007, Hoch et al., 2010, Small and Rentsch, 2010). Qualitatively, shared leadership can help companies to lower staff turnover rates, increase customer satisfaction (Williams et al., 2002), receive many external awards (Merkens and Spencer, 1998), resist market turmoil, and sustain financial performance (Manz et al., 2010). In quantitative studies, shared leadership was found to be important for team performance and effectiveness in new venture top management teams (Ensley et al., 2006), social worker virtual study groups (Pearce et al., 2004), change management teams (Pearce and Sims, 2002), consulting teams (Carson et al., 2007, Hoch et al., 2010), and postgraduate university student teams (Small and Rentsch, 2010).

Based on the previous sub-section's description of the typology of leadership developed by Pearce et al. (2003) , directive, transactional, transformational, and empowering leadership behaviors should be related positively to team effectiveness. This is expected to be applicable for shared leadership as well. Ensley et al (2006) found that shared directive, transactional, transformational, and empowering leadership were related positively to the performances of startup companies in the new venture top management teams. These four leadership behaviors also had positive impacts on team outcomes for virtual teams of social workers (Pearce et al., 2004).

Based on these findings, it can also be expected that shared leadership with shared directive, transactional, transformational and empowering leadership behaviors among team members will be related positively to team effectiveness in the Hong Kong context. The second hypothesis on shared leadership was established as below:

Hypothesis 2:

Shared leadership will be related positively to team effectiveness, such that the more directive, transactional, transformational and empowering the team members' behaviors are, the higher the team effectiveness in the shop will be.

2.10.3 Vertical versus shared leadership

Many studies have supported that both vertical and shared leadership are important to team effectiveness (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006, Carson et al., 2007, Hoch et al., 2010, Manz et al., 2010, Small and Rentsch, 2010). However, when comparing the impacts of these two leadership models, shared leadership has emerged as the more prominent (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006). Shared leadership was found to be significant and important in predicting team effectiveness in many empirical studies (Pearce and Sims, 2002,

Pearce et al., 2004, Ensley et al., 2006, Carson et al., 2007, Hoch et al., 2010, Manz et al., 2010, Small and Rentsch, 2010).

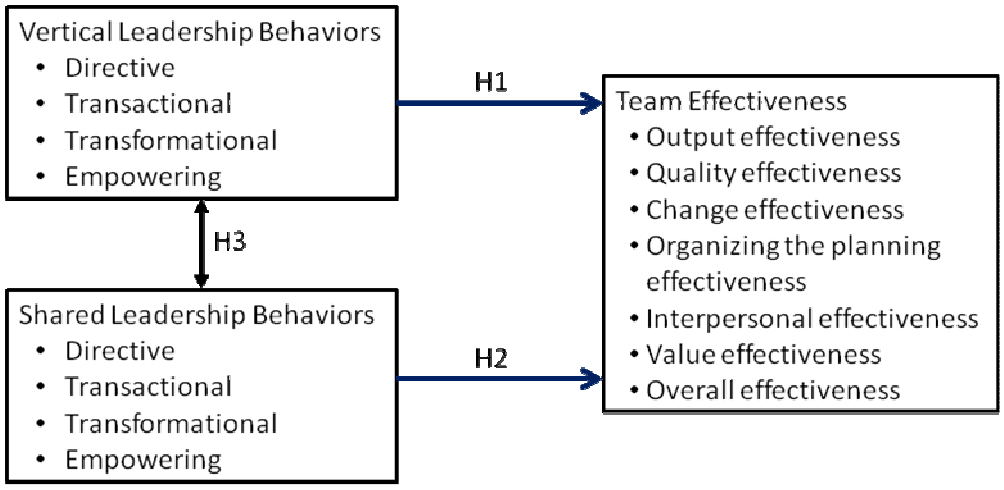
However, the importance and contribution of vertical leadership has not always been supported. In a study of virtual social worker teams, Pearce et al. (2004) found that vertical leadership was not significant to team outcomes or less important than shared leadership in predicting team or organization effectiveness in change management teams (Pearce and Sims, 2002) or new venture top management teams (Ensley et al., 2006). Therefore it was considered reasonable to hypothesize that shared leadership is more important than vertical leadership in predicting team effectiveness.

Therefore, the third hypothesis was set up as:

Hypothesis 3:
Shared leadership will be more important than vertical leadership in predicting team effectiveness.

To summarise these three hypotheses, the research framework of this study is shown in Figure 2-2.

Figure 2-2: Research Framework of this study



2.11 **Chapter conclusion**

In this literature review, the development of leadership and the rise of shared types of leadership have been discussed. From the review of past articles and empirical studies, it can be concluded clearly that leadership, both from vertical leaders and among team members, is important for predicting team performance, with shared leadership being more impactful. Three hypotheses were proposed to explore whether this is true for an Asian city like Hong Kong. The measures of vertical and shared leadership behaviors (Pearce et al., 2003) and team effectiveness (Pearce and Sims, 2002) have also been explained in this chapter. The following chapter will present the research methodology used for this study.

3. Chapter 3: Methodology

3.1 Introduction

Following the literature review, this chapter presents the strategies and processes used to collect the necessary data to test the hypotheses and answer the research questions. This methodology was adopted from Ensley et al. (2006) and Pearce and Sims (2002), who studied the impact of vertical and shared leadership on new venture top management teams and change management teams respectively. Two main areas are presented in this chapter: the research design and data analysis methodology.

Positivism and quantitative research methodologies were adopted for this research to test the hypotheses. In the first part of this chapter, a detail description of the research design is presented, including the method deployed, sample collection, procedures followed, and the measurement instruments.

In the second part of the chapter, details are given of the statistical tools used in analyzing the data. This includes the preparation for data analysis, the descriptive statistical analysis, the reliability and validity testing approaches, and the inferential statistical analysis used to test the hypotheses.

3.2 Research Design

This research methodology repeated the previous empirical studies of vertical and shared leadership theory done by Ensley et al. (2006), Pearce et al. (2004), and Pearce and Sims (2002). These studies, however, were mainly conducted in the United States. This research extended the explorations to the Hong Kong retail shop management context and attempted to test its generalisability and replicability.

3.2.1 Method

In this research, a positivism approach was used. Positivism uses precise and objective measures to discover universal laws that can be used to predict human behaviors and activities. The emphasis is placed on the validity and reliability of the research results. Therefore the drawback may be a lack of in-depth understanding of the subjects' meaning systems, such as the way of thinking, feeling and actions as in the interpretivist approach (Cavana et al., 2001).

Deductive reasoning and a quantitative methodology were used to test the three hypotheses related to vertical and shared leadership in the retail industry in Hong Kong. The subjects' opinions were collected via questionnaires in a non-contrived study setting. Therefore the researcher's personal values and perspectives were separated from those of the research subjects, so that their decisions could be made objectively (Bryman, 2008).

3.2.2 Sample

In this study, the researcher decided to invite a single organization to participate in the research, in order to eliminate situational variables such as operational rules and standards, working culture, industry factors, and other factors that may influence team effectiveness. The chosen organization is a mobile communications operator in Hong Kong offering mobile solutions to both corporate clients and retail customers for over 25 years. In this study, only the frontline sales staff and their immediate managers in the retail business were studied. This company has 47 retail shops, distributed widely in different districts in Hong Kong. All the shops are located in the prime locations of their respective districts. The appointed leaders are the shop managers and supervisors, generally referred to as shop managers, who manage all the daily operation of the shops, including staff rosters, performance achievement, staff coaching, rule enforcement, alignment with other departments, and all other activities related to the shop. Each shop has frontline sales staff, generally called salespersons, to respond to customers'

enquiries, and promote mobile phones and plans. Depending on the shop's location, there are 3 to 18 sales staff members working in each shop. In total, 262 salespersons and 94 shop managers are employed by this retail business unit.

This company offers a wide selection and complex mobile solutions to its clients, including mobile voice and data connectivity, a wide variety of value-added services, home-use broadband solutions, cross-border solutions, Wi-Fi data connectivity, a variety of mobile devices, and many other accessories related to mobility solutions. Therefore it is impossible for a staff member to gain and retain knowledge about all the details. Normally salespersons specialize in certain solutions through training and more frequent communication with Product Management and Marketing Departments within their company. Staff members work interdependently with each other to share knowledge and experience and sometimes even serve the same client together.

This company applies a centralized management approach with routine daily operations. Information dispatch and collection are normally done through their intranet and sophisticated computer systems connecting all the shops with the centralized servers. Shop managers and the senior management team have weekly or bi-weekly meetings to review the business trends and discuss any concerns related to the business. Major decisions have to be referred to the senior management team. For example, a standardized commission scheme, which measures both individual performance and shop level achievement, has been designed for all retail sales staff and is reviewed yearly by the senior management team. Shop managers can provide suggestions and reflect staff members' preferences but may not have influential votes. Similarly, there is an Operation Team reporting to the same senior management team to set the routine work procedures and guidelines for all shop staff to follow. Shop managers are in the position to bridge between frontline staff and the senior management team and also the Operation Team, but do not have solid authority to change a situation.

3.2.3 Procedure

This research was agreed upon by the company's Director of Retail Sales, with the support of the Training and Development Manager during information dispatch and notification. A meeting was arranged to explain the scope of the research, especially the method of conducting the study, including the selection of the research sample, the procedure for approaching participants, the time frame for data collection, and the ethical requirements. In exchange for their participation, a presentation to their senior management team on the research findings and implications was promised.

Since the retail shops are widespread in different districts in Hong Kong and the staff is normally busy serving the clients during shop opening hours, it was difficult to have the participants complete the paper-survey form during office hours, either through mail or in person. To address the drawback of slow response and possible errors in the manual transcription of data from hard copy questionnaires to the analysis tool, a web-based survey was used instead. Indeed, web-based surveys are becoming popular in research due to advantages such as lower administration costs, faster response time, easier data entry and analysis, more convenience, and higher flexibility (Ilieva et al., 2002, Evans and Mathur, 2005). In addition, all members of the sample groups work in the telecommunication field and are familiar with the internet and email, so a web-based survey was not expected to present any difficulties for them.

A third-party survey platform called "Survey Monkey" was used to develop the on-line survey for this research. Before notifying the participants, the researcher uploaded the Chinese version of the information statement and the questionnaires to the platform. To ensure translation quality, the back translation technique (Brislin, 1970) was used; the researcher first translated the content and it was then back translated to English by a third person fluent in both Chinese and English to verify the translation quality. The information statement stated clearly the researchers' information, research purpose, scope of participation, and response protection. It was specifically stated that the participants could decide whether or not they wanted to participate in this survey. Even

if they had started the survey, they could still withdraw at any time without any disadvantage to themselves. The anonymity of the responses was guaranteed because the participants were not required to provide their names or any other information that could be used to identify them. The information statement is listed in Appendix 1 for English and 2 for Chinese.

The information statement and the link to this on-line platform were forwarded to the Training and Development Manager of the Company. The invitation to all target samples was issued in two steps: The Director of Retail Sales announced the survey to all the shop managers during their weekly meeting and encouraged them to volunteer to participate, then the Training and Development Manager sent out the information statement and the web link connected to the questionnaire provided by the researcher via the company's internal email system. The company did not want to release the staff email contacts due to concerns about commercial confidentiality.

When the participants received the email, they could click on the electronic link to access the web-based survey. They then saw the information statement again on the first page. If they moved on to the survey, this implied their consensus to participate. Since the unit of analysis for this research was designed for the group level, all data collected from staff of the same shop were aggregated into shop level, therefore all staff had to select the appropriate shop code. These shop codes were provided by the company, being used already in the company system. The salespersons were able to access the survey in three parts. The first part was related to the vertical leadership behaviors of their respective shop managers, the second was concerned with the shared leadership behaviors among the salespersons as a whole in their shop, and the last one was to evaluate their shop effectiveness. The shop managers only needed to respond to the shop effectiveness part.

The data collection period lasted for two weeks. By the end of the first week, a reminder email was sent by the Training and Development Manager to encourage the staff

participation. By the end of the two-week data collection period, the web survey platform was able to provide an Excel-format data sheet containing all the responses from the shop managers and salespersons.

3.2.4 Measure of variables

The measures for the three types of variables, independent, dependent, and control, are described below:

3.2.4.1 Instrument for measuring the Independent variables: vertical and shared leadership behaviors

The leadership behavior instrument was adopted from Ensley et al. (2006), who studied the importance of vertical and shared leadership within new venture top management teams. A full-scale study of its validity for measuring leadership was conducted by Pearce et al. (2003) and strong psychometric properties were found. This provided a leadership typology consisting of four variables: directive, transactional, transformational, and empowering leadership behaviors.

The questionnaire for measuring vertical leadership behaviors, developed by Ensley et al., is shown in Table 3-1.

Table 3-1: Ensley and colleagues'(2006) questionnaires in measuring vertical leadership behaviors

Ensley and colleagues'(2006) questionnaires in measuring vertical leadership behaviors

1. Directive Leadership Behaviors
   - My team leader establishes my performance goals.
   - When it comes to my work, my team leader gives me instructions on how to carry it out.
   - My team leader lets me know about it when I perform poorly.
2. Transactional Leadership Behaviors
   - My team leader gives me positive feedback when I perform well.
   - My team leader will recommend that I am compensated more if I perform well.
3. Transformational Leadership Behaviors
   - My team leader expects me to perform at my highest level.
   - My team leader isn't afraid to "break the mold" to find different ways of doing things.
   - My team leader provides a clear vision of where our team is going.
   - My team leader shows enthusiasm for my efforts.
4. Empowering Leadership Behaviors
   - My team leader encourages me to treat myself to something I enjoy when I do a task especially well.
   - My team leader encourages me to work together with other individuals who are part of the team.
   - My team leader and I work together to decide what my performance goals should be.
   - My team leader advises me to look for the opportunities contained in the problems I face.

In order to reflect the situation in a shop environment, the term “team leader” in the original instrument was changed to “shop manager” for measuring vertical leadership behaviors, and “team members” for shared leadership behaviors. For example, the original question “When it comes to my work, my team leader gives me instructions on how to carry it out” was changed to “When it comes to my work, my shop manager (or team members) gives (give) me instructions on how to carry it out”. The adjusted questions used in this research are listed in Table 3-2.

The same questions were used to measure the vertical leadership behaviors (shop manager) and the shared leadership behaviors (team members as a whole). This “double response format” has been used successfully for measuring vertical and shared leadership in previous research (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006). The measure uses a five-point scale with the following responses: 1 (definitely not true), 2 (not true), 3 (neither true nor untrue), 4 (true), and 5 (definitely true). Only the salespersons needed to fill in this questionnaire in relation to the shop manager and team members as a whole. The responses from the same shop were grouped to form an average item score for shop level. Then the respective items for different leadership behaviors were grouped further and averaged to form the result at variable level. For example, the three mean-scored items of each shop were grouped to form the vertical directive leadership behavior of that shop.

Table 3-2: Questionnaire uses to measure vertical and shared leadership behaviors in this research

The questions used to measure vertical and shared leadership behaviors in this research are listed below. "Shop Manager" was used for measuring vertical leadership behaviors, while "Team Members" was used for measuring shared leadership behaviors (blanketed) in the questionnaire.

1. Directive Leadership Behaviors
    - My shop manager (team members) establishes (establish) my performance goals.
    - When it comes to my work, my shop manager (team members) gives (give) me instructions on how to carry it out.
    - My shop manager (team members) lets (let) me know about it when I perform poorly.
2. Transactional Leadership Behaviors
    - My shop manager (team members) gives (give) me positive feedback when I perform well.
    - My shop manager (team members) will recommend that I am compensated more if I perform well.
3. Transformational Leadership Behaviors
    - My shop manager (team members) expects (expect) me to perform at my highest level.
    - My shop manager (team members) isn't (aren't) afraid to "break the mold" to find different ways of doing things.
    - My shop manager (team members) provides (provide) a clear vision of where our team is going.
    - My shop manager (team members) shows (show) enthusiasm for my efforts.
4. Empowering Leadership Behaviors
    - My shop manager (team members) encourages (encourage) me to treat myself to something I enjoy when I do a task especially well.
    - My shop manager (team members) encourages (encourage) me to work together with other individuals who are part of the team.
    - My shop manager (team members) and I work together to decide what my performance goals should be.
    - My shop manager (team members) advises (advise) me to look for the opportunities contained in the problems I face.

3.2.4.2 Instrument for measuring dependent variables: team effectiveness

The team effectiveness questionnaire was adopted from Pearce & Sims (2002), and was an integration of performance and effective measures developed by Ancora and Caldwell (1992), and Manz and Sims (1987). This questionnaire assessed team effectiveness in seven dimensions: output effectiveness, quality effectiveness, change effectiveness, organizing and planning effectiveness, interpersonal effectiveness, value effectiveness and overall effectiveness. These measures were also presented to the participating company's Director of Retail Sales and agreement was obtained about its validity in assessing the shop effectiveness. Please refer to Table 3-3 for all the items in this questionnaire.

In this research, both salespersons and shop managers were asked to rate their respective shops' effectiveness. As a result, the salespersons' and shop managers' ratings were obtained for hypotheses testing from two perspectives.

This measure used a five-point scale with the following responses: 1 (definitely not true), 2 (not true), 3 (neither true nor untrue), 4 (true), and 5 (definitely true). The combined score of all the measured items on team effectiveness was used to test the hypotheses.

Table 3-3: Team Effectiveness Measures

Questions for measuring team effectiveness of the retail shop.

1. Output effectiveness
    a. The team delivers its commitments.
    b. The team delivers its commitments on time.
    c. The team provides a volume of work consistent with established standards.
    d. The team is highly effective at implementing solutions.
    e. The team delivers important changes.
2. Quality effectiveness
    a. The quality of the team's output is very high.
    b. The team performs duties accurately and consistently.
    c. The team eliminates root problems, not just symptoms.
3. Change effectiveness
    a. The team faces new problems effectively.
    b. The team changes behavior to meet the demands of the situation.
    c. The team copes with change very well.
4. Organizing and planning effectiveness
    a. The team sets goals and priorities for maximum efficiency.
    b. The team develops workable plans.
    c. The team works on important problems.
    d. The team has its priorities straight.
5. Interpersonal effectiveness
    a. The team communicates its progress.
    b. The team proactively communicates its progress.
    c. The team keeps everyone informed.
    d. The team keeps everyone informed on its progress.
6. Value effectiveness
    a. The team's contribution to the company is very valuable.
    b. The team makes valuable contributions to the company.
    c. The contributions of this team are very valuable to the company.
7. Overall effectiveness
    a. The team is highly effective.
    b. The team is making very good progress on the teams' charter.
    c. The team does very good work.
    d. The team does a very good job.

3.2.4.3 Measure for control variable: team size

The team size for each shop was defined as the number of staff in that shop, including the frontline sales staff, supervisor and shop manager. These details were provided by the Training and Development Manager of the company.

Demographic information was not collected in this research due to the objection from the Director of Retail Sales, who believed these data could be sensitive in their competitive environment.

3.3 Data Analysis

The statistical software program Statistical Package for Social Science (SPSS), version 15.0 for Windows, was used to analysis the collected data. The analysis was conducted in four parts: preparing the data for analysis, descriptive statistical analysis of variables, reliability and validity analyses, and the inferential statistical analysis for testing the hypotheses.

3.3.1 Preparing the data for analysis

After receiving the data from Survey Monkey, the next step was to ensure that the data collected were acceptable (Cavana et al., 2001). This involved two steps: checking for blank responses and excluding shops with too few responses.

1) Checking for blank responses: Questionnaires with missing answer were omitted from the data analysis. The advantage of the web-based survey is that, when the respondent wants to submit the response with unanswered question(s), a reminder message will pop up on the screen to alert the respondent. Of course, this is not compulsory and the respondent can still submit the questionnaire with blank answers.
2) Excluding shops with too few responses: Since this research studied the vertical and shared leadership impact on shop level, shops with only one response from

the salespersons or with no response from the shop manager were excluded from the data analysis.

After editing the raw data, the shop codes used to identify to which shops the respondents belonged were replaced by numerals. This was to ensure that the shops and the respondents could not be identified.

3.3.2 Descriptive statistics

The first part of the analysis focused on descriptive statistics to provide a feel for the data collected from the questionnaires (Cavana et al., 2001). This included the means and standard deviations of all the variables in the research. The mean is the arithmetic average indicating the central tendency of the data while the standard deviation shows the spread of these data (Cooper and Emory, 1995).

3.3.3 Validity and reliability

"Validity refers to the extent to which a test measures what we actually wish to measure. Reliability has to do with the accuracy and precision of a measurement procedure" (Thorndike and Hagen, 1969, P.5). Therefore it was important to test the validity and reliability of the collected data before carrying out further inferential statistical analysis. The following paragraphs will explain how the validity and reliability of the data and measures were assessed.

3.3.3.1 Validity

In quantitative research, the validity of the measuring instrument can be grouped under three types: face validity, content validity, and construct validity (Cavana et al., 2001).

Face validity is concerned about whether the questionnaire items are clear and understandable to the respondents. Content validity checks if the measures contain items that can represent the concept adequately (Cavana et al., 2001). This research was

a replication of the study by Ensley et al. of new venture top management teams (2006) and Pearce's and Sims' study of change management teams (2002) in the United States, adopted for retail shop management in Hong Kong. The full-scale validation of the independent variables measures, that is the vertical and shared leadership behavior measures, were carried out by Pearce et al. (2003) and found to have strong psychometric properties. For team effectiveness, the measure, adopted from Pearce and Sims (2002), was an integration of performance and effective measures from Ancora and Caldwell (1992), Manz and Sims (1987) and Cox (1994 in Pearce and Sims, 2002). The key advantages of using these standardized measures and questionnaires is that validity and reliability are tested and established (Maher Jr and Kur, 1983), especially for face and content validity (Cavana et al., 2001).

The third type of validity is construct validity, which examines how well the results obtained from the data collected with the measuring instruments fit the theories. Exploratory factor analysis (EFA) was used to testify the construct validity of the instruments used to measure vertical leadership, shared leadership, and team effectiveness (Cavana et al., 2001). EFA can check if the items that intended to make up a construct are clustered together to form a factor. In this research, principal axis factoring and varimax rotation were used for the data analysis and extraction. Those items with eigenvalues, that is the sum of the variances of the factor value, higher than 1 were extracted (Zaltman and Burger, 1975). If the Bartlett test of sphericity is significant (<0.05) and the Kaiser-Meyer-Olkin (KMO) measure of adequacy is greater than 0.8, then the data collected can be used for further analysis (Kaiser, 1974).

3.3.3.2 Internal reliability of the measures

The internal reliability of the questionnaire was tested with Cronbach's alpha, which is a reliability coefficient that can indicate how well the items in a dimension are correlated with one another (Cronbach, 1946). This is the most popular test of inter-item consistency reliability for multipoint-scale items and is perfectly adequate in almost all

cases (Cooper and Emory, 1995, Cavana et al., 2001). The higher the coefficients, the better the items are correlated to each other, and the better the measuring instrument for the respective variable.

3.3.3.3 Within group interrater reliability

In this study, the studied variables were measured at shop level; this means the individual responses to the items were mean scored and then aggregated to form the result of the specific variable of a shop. For example, the vertical directive leadership of Shop 1 was calculated through averaging the mean scores of the three measured items from all Shop 1 members. As a result, the vertical and shared directive, transactional, transformational and empowering leadership constructs of each shop were calculated to test the hypotheses.

Before the results were generated, the appropriateness of aggregating the individual ratings to the team level was assessed using the within-group interrater reliability method used by James et al. (1984). This within-group reliability uses j-number of parallel items procedures named $r_{WG(J)}$ which provides a justification for aggregating individual mean scores (Kozlowski and Hattrup, 1992). The formula for calculating $r_{WG(J)}$ is provided below (James et al., 1984):

$$r_{WG(J)} = \frac{J[1 - (\overline{S_{x_j}^2}/\sigma_{EU}^2)]}{J[1 - (\overline{S_{x_j}^2}/\sigma_{EU}^2)] + (\overline{S_{x_j}^2}/\sigma_{EU}^2)}$$

$r_{WG(J)}$ is the within-group interrater reliability for judges' mean scores based on J essentially parallel items

$\overline{S_{x_j}^2}$ is the mean of the observed variances on the *J* items, and

σ_{EU}^2 is the variance calculated by $(A^2-1)/12$ where *A* corresponds to the number of alternatives in the response scale for *J* items; and the subscript “EU” refers to an expected error (E) variance based on a uniform (U) distribution.

The $r_{WG(J)}$ has values between 0 and 1.0; the higher the value the better the within-group interrater reliability. Generally, a value above 0.70 denotes acceptable agreement (James et al., 1984).

3.3.4 Inferential statistical analysis

3.3.4.1 Inter-correlation among study variables

For the interval-scaled variables, the Pearson correlation coefficient was used to indicate the bivariate relationships, include the direction, strength and significance, of the studied variables (Cavana et al., 2001). A Pearson correlations matrix was generated among the studied variables to check how closely they were related to each other.

3.3.4.2 Hypotheses testing

The focus of this study was an aggregated single dependent variable, the team effectiveness of the shop. The independent variables, which are the directive, transactional, transformational and empowering leadership behaviors of vertical and shared leadership, were measured with interval measurements. Therefore, the multiple regression statistical analysis method was suitable for two reasons: for prediction *per se* and for measuring the relative importance of the predictor variables. For the former of these, it was of interest to find the best linear relationship between the set of independent variables with the dependent variable. The coefficient of determination, R^2, and the statistical significance of the overall model were used to calibrate the predictive accuracy. For the latter reason, the interest was focused on understanding the individual predictor variable on the dependent variable. The magnitude of the standardized regression coefficients and the associated t-test probabilities were used to evaluate the relative impact of individual independent variables (Mason and Perreault, 1991). Team size was used as the control variable in all the regression equations.

In Hypothesis 1 - which stated that vertical leadership will be related positively to team effectiveness, such that the more directive, transactional, transformational and empowering the shop management behaviors are, the higher the team effectiveness in the shop will be - the coefficient of determination, R^2, was used to measure the amount of variance explained in the team effectiveness by the vertical leadership behaviors. A low R^2, that is close to zero, indicates a not very good model, while a high value, close to 1, shows that the vertical leadership behaviors explain team effectiveness very well (Cavana et al., 2001). The significant standardized regression coefficients for the four types of vertical leadership behaviors were checked to evaluate their importance for team effectiveness.

Similarly for Hypothesis 2, replacing vertical leadership behaviors with shared leadership behaviors to determine how much variance can be explained by shared leadership behaviors for team effectiveness, the significant standardized regression coefficients for the four types of shared leadership behaviors were checked and compared to evaluate their importance for team effectiveness.

In order to test Hypothesis 3, that shared leadership is more important than vertical leadership in predicting team effectiveness, the "usefulness analysis" involving hierarchical multiple regression was used (Farh et al., 1990, Darlington, 1968). This analysis examines the relative usefulness of the vertical and shared leadership in explaining the team effectiveness by entering the independent variables in different sequences into the overall regression equation. The change in R^2 was measured for shared leadership beyond vertical leadership and vertical leadership beyond shared leadership. The one added higher significant value to the R^2 was more important.

3.4 **Chapter conclusion**

This chapter has summarized the research methodology applied in this research. A quantitative methodology within a non-contrived setting was used to test the hypotheses

about vertical and shared leadership for a single company with 47 retail shops using a cross-sectional approach. The data collection was through an on-line web survey. The data were analysed included descriptive statistics, inference statistics, correlation and hypotheses testing. Multiple regression analysis was used to test the hypotheses. The next chapter will describe the data analysis and the findings.

4. Chapter 4: Data Analyses and Findings

This chapter presents the findings of this quantitative research. A brief overview of the collected data is presented. The descriptive statistics for all the variables then follow. The checking of the validity and reliability of the data, the inter-correlation among study variables, and the hypotheses testing are also described.

4.1 Data collection

In total, 94 shop managers and 262 salespersons from 47 shops were invited to participate in this survey and 90 and 244 responses were received from the shop managers and salespersons respectively. The response rate was 93.8% in total: 95.7% for the shop managers and 93.1% for the salespersons. This good response rate was probably contributed to by the senior management team's encouragement during the weekly meeting and the patient explanation from the Human Resources Manager.

All of the 334 respondents had answered all questions. Since this research considered the group process of vertical and shared leadership on the shop effectiveness, the responses were grouped according to their respective shops. These responses were from 47 shops. However, four shops were discarded due to too few responses: three with only salesperson's response and one with only the sales manager's response. As a result, data from 43 shops were used to test the hypotheses.

4.2 Descriptive statistics of variables

4.2.1 Descriptive statistics of shop size

The frequency distribution and descriptive statistics for these 43 shops are listed in Table 4.1. Team size is defined as the total number of staff in a shop, which is the sum of salespersons and shop managers. The smallest shop had 4 staff members and the largest one had 21, with the mean and standard deviation equal to 8.00 and 3.19

respectively. The most common team size was 6 or 7, covering 41.8% of the total sample size. Team sizes above 11 or below 5 were rare, only found in 4 shops, or 9.2% of the total sample.

Table 4-1: Shop size descriptive statistics

	Minimum	**Maximum**	**Mean**	**Standard Deviation**
Shop size	4	21	8.00	3.19

4.2.2 Descriptive statistics of independent variables

For the ratings of vertical leadership behaviors by the frontline sales staff (Table 4-2), all data lie between 2.25 and 5.00. The mean values are between 4.08 and 4.24 and the standard deviations are between 0.52 and 0.54. Vertical directive leadership has the highest mean value of 4.24 while vertical empowering leadership has the lowest of 4.08, indicating that vertical directive leadership behavior is mostly observed in the appointed shop management but that empowering behavior is the least.

For the ratings on shared leadership behaviors (Table 4-2), all data were found to lie between 2.42 and 4.90. The mean values are between 4.06 and 4.10 and the standard deviations are between 0.44 and 0.49; both ranges are lower than vertical leadership. This implies that vertical leadership is observed more commonly than shared leadership in this company. With a higher standard deviation than that of shared leadership, the variation in the use of vertical leadership is more than that in shared leadership among the different shops.

Shared transformational leadership has the highest mean value of 4.10 while shared transactional leadership has the lowest of 4.06, but the difference is only 0.04, showing that team members have used these four types of leadership behaviors quite evenly but relatively less than vertical leadership behaviors. Among all the independent variables,

vertical directive leadership behavior has the highest mean score (4.24) while shared transactional leadership behavior shows the lowest (4.06).

Table 4-2: Descriptive statistics of independent variables

	Minimum	**Maximum**	**Mean**	**Standard Deviation**
VERTICAL LEADERSHIP				
Vertical Directive	2.25	4.95	4.24	0.54
Vertical Transactional	2.88	5.00	4.18	0.52
Vertical Transformational	2.50	4.80	4.17	0.54
Vertical Empowering	2.50	4.85	4.08	0.54
SHARED LEADERSHIP				
Shared Directive	2.42	4.87	4.07	0.49
Shared Transactional	2.50	4.83	4.06	0.47
Shared Transformational	3.25	4.86	4.10	0.44
Shared Empowering	2.81	4.90	4.09	0.48

4.2.3 Descriptive statistics of dependent variable

Team effectiveness was rated by both shop managers and salespersons. Shop managers ratings are between 3.16 and 5.00 with 4.02 and 0.44 for the mean value and standard deviation respectively (Table 4-3). Salespersons ratings have a slightly lower range between 2.76 and 4.75. The mean and standard deviation are 4.05 and 0.46 respectively.

Table 4-3: Descriptive statistics of dependent variables

	Minimum	**Maximum**	**Mean**	**Standard Deviation**
Sales rating on team effectiveness	2.76	4.75	4.05	0.46
Shop management rating on team effectiveness	3.16	5.00	4.02	0.44

4.3 Validity and reliability Analysis of data

4.3.1 Validity of the data

The construct validities of the vertical leadership, shared leadership and team effectiveness were examined using exploratory factor analysis (EFA). The purpose of this was to check if the items in a measure were clustered into factors as expected. The principal axis factoring extraction method and varimax rotation was used as this is most widely adopted (Costello and Osborne, 2005). The eigenvalues were set to be above 1 (Zaltman and Burger, 1975) for extraction. The significance level of the Bartlett test of sphericity was set to be below 0.05 and the Kaiser-Meyer-Olkin (KMO) measure of adequacy was greater than 0.8 (Kaiser, 1974).

4.3.1.1 Vertical leadership

After running the factor analysis for the vertical leadership behavior data set, one factor was extracted from the items. Only this factor has an eigenvalue higher than 1 and it alone can explain 82.4% of the variance. Table 4-4 shows the loading and communality of the items with this factor. This list is shown in descending order of loading. Loading means the correlation coefficient between the factor and the item (Cooper and Emory, 1995). Communality is the estimate of variance in each item that is explained by the factor (Cooper and Emory, 1995). The loadings and communalities are very high for these 13 items, range from 0.718 to 0.955 and 0.516 to 0.913 respectively. This supports that all the items in this measure tap into one construct, the vertical leadership.

The result of Barlett test of sphericity is significant and the KMO value is 0.94, much greater than 0.8 (Table 4-5). Therefore the data collected for this measure were considered to be significant and appropriate for further data analysis.

Table 4-4: Exploratory factor analysis on vertical leadership behaviors

Construct	**Item**	**Factor Loading**	**Communality**
Vertical leadership	VLB_13	.955	.913
	VLB_12	.945	.893
	VLB_4	.943	.888
	VLB_11	.939	.881
	VLB_6	.929	.864
	VLB_2	.927	.860
	VLB_9	.923	.852
	VLB_5	.921	.849
	VLB_3	.915	.838
	VLB_8	.915	.837
	VLB_1	.908	.825
	VLB_7	.832	.693
	VLB_10	.718	.516
Eigenvalue = 10.71 % of Variance = 82.38%			

Table 4-5: KMO and Bartlett's Test on vertical leadership behaviors

Test		**Result**
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.954
Bartlett's Test of Sphericity	Approx. Chi-Square	810.622
	df	78
	Sig.	.000

4.3.1.2 Shared leadership

Exploratory factor analysis for the shared leadership behavior data set also generated one factor for all the items. This factor has an eigenvalue higher than 1 and it alone can explain 75.2% of the variance. The loadings for these 13 items range from 0.745 to 0.936 and communalities are from 0.555 to 0.876, which are very high (Table 4-6). Therefore this supports that all items in this measure tap into one construct, the shared leadership.

The result of Barlett test of sphericity is significant and the KMO value is 0.89, greater than 0.8 (Table 4-7). Therefore the data collected for this measure are significant and appropriate for further data analysis.

Table 4-6: Exploratory factor analysis on shared leadership behaviors

Construct	**Item**	**Factor Loading**	**Communality**
Shared leadership	SLB_2_avg	.936	.876
	SLB_12_avg	.932	.868
	SLB_5_avg	.929	.862
	SLB_4_avg	.926	.858
	SLB_1_avg	.907	.823
	SLB_11_avg	.883	.780
	SLB_13_avg	.858	.736
	SLB_9_avg	.853	.728
	SLB_3_avg	.842	.709
	SLB_8_avg	.840	.705
	SLB_6_avg	.817	.668
	SLB_7_avg	.782	.611
	SLB_10_avg	.745	.555
Eigenvalue = 9.78 % of Variance = 75.22%			

Table 4-7: KMO and Bartlett's Test on shared leadership behaviors

Test		**Result**
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.885
Bartlett's Test of Sphericity	Approx. Chi-Square	705.709
	df	78
	Sig.	.000

4.3.1.3 Team effectiveness

Exploratory factor analysis for the team effectiveness data set also generated one factor for the items with higher than 1 eigenvalue and 79.3% of the variance being explained. The loadings for these items range from 0.797 to 0.943 and communalities are from

0.636 to 0.890, which are very high (Table 4-8). Therefore these findings support that all items in this measure tap into one construct, team effectiveness.

The result of the Barlett test of sphericity is significant and the KMO value is 0.93, far higher than 0.8 (Table 4-9). Therefore the data collected for this measure are significant and appropriate for further analysis.

Table 4-8: Exploratory factor analysis on team effectiveness

Construct	**Item**	**Factor Loading**	**Communality**
Team Effectiveness	TE_13	.943	.890
	TE_8	.941	.885
	TE_11	.921	.848
	TE_18	.919	.845
	TE_19	.916	.838
	TE_26	.914	.836
	TE_12	.910	.828
	TE_21	.908	.825
	TE_5	.904	.817
	TE_15	.898	.807
	TE_7	.897	.805
	TE_17	.895	.800
	TE_9	.892	.796
	TE_10	.892	.795
	TE_25	.888	.789
	TE_3	.879	.773
	TE_14	.877	.769
	TE_24	.876	.768
	TE_1	.874	.763
	TE_2	.865	.748
	TE_6	.846	.715
	TE_4	.838	.702
	TE_20	.833	.694
	TE_22	.831	.691
	TE_23	.812	.660
	TE_16	.797	.636
Eigenvalue = 15.06 % of Variance = 79.27%			

Table 4-9: KMO and Bartlett's Test on team effectiveness

Test		**Result**
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.931
Bartlett's Test of Sphericity	Approx. Chi-Square	1150.857
	df	171
	Sig.	.000

4.3.2 Internal reliability of the measures

An internal reliability test using Cronbach's coefficient alpha was performed to assess the inter-item consistency of all the independent leadership variables and the dependent team effectiveness. The results are shown in Table 4-13.

The reliability scores for all leadership variables and the team effectiveness range from 0.90 to 0.99. In general, it is good when Cronbach's coefficient alpha value gets above 0.8 (Cavana et al., 2001, Bryman, 2008), hence the internal consistency reliability of the measures used in this research can be considered to be very good.

Table 4-10: Cronbach's coefficient alphas of measured variables

Variables	**Cronbach's coefficient alpha**
Vertical Directive	0.95
Vertical Transactional	0.95
Vertical Transformational	0.93
Vertical Empowerment	0.94
Shared Directive	0.93
Shared Transactional	0.93
Shared Transformational	0.90
Shared Empowerment	0.91
Salespersons rating on team effectiveness	0.99
Shop managers rating on team effectiveness	0.96

4.3.3 Within group interrater reliability

Since the variables were calculated by summing the individual responses to obtain a group level indicator for the vertical and shared leadership styles for each shop before hypotheses testing, a within-shop agreement was required. The procedure used by James et al. (1984) to access the within-group reliability on j-number of items known as $r_{WG(J)}$ was used. This provides a justification for aggregating the individual responses to the shop level. With a range of $r_{WG(J)}$ values between 0 to 1.0, scores above 0.7 are acceptable. The values calculated for the four types of vertical and shared leadership behaviors are listed in Table 4-14. All of these $r_{WG(J)}$ values fall between 0.78 to 0.90 and show support to aggregating the individual responses to shop level.

Table 4-11: Within-shop interrater reliability

Variables	$r_{WG(J)}$
Vertical Directive	0.90
Vertical Transactional	0.78
Vertical Transformational	0.89
Vertical Empowerment	0.88
Share Directive	0.90
Share Transactional	0.85
Share Transformational	0.89
Share Empowerment	0.90

4.4 **Inferential statistical analysis**

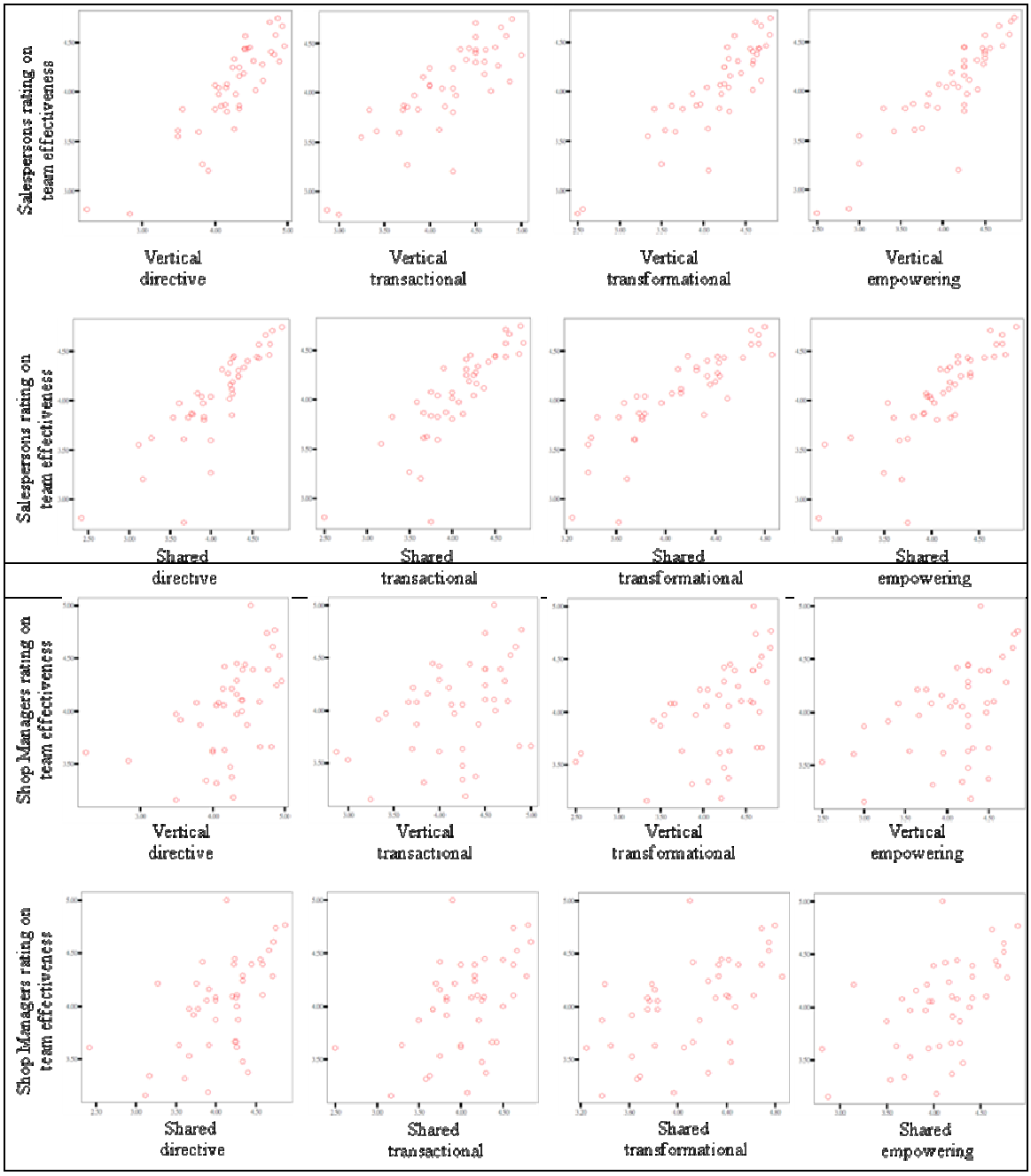
To answer the three hypotheses of this research, the multiple regression analysis statistical method was used as the study involved one dependent variable, team effectiveness, and multiple independent variables, the four vertical and four shared leadership behaviors. Before applying the collected data to examine the hypotheses, the linearity relationships between the dependent variable and all independent variables were examined and the correlations among all variables were calculated (De Veaux et al., 2008). Then the three hypotheses were tested with multiple regression analysis, as described in this section.

4.4.1 Linearity relationship between dependent and independent variables

In regression analysis, an equation, usually a linear model, is developed to relate a dependent variable to one or more independent variables, either predictor or explanatory (Cavana et al., 2001). Therefore it is important to check whether the relationship between the dependent variable and all the independent variables are linear, or at least not bent (De Veaux et al., 2008). The scatter plots of the salesperson's ratings of team effectiveness and the shop managers' ratings of team effectiveness were plotted against all four types of vertical and shared leadership behaviors, as shown in Figure 4-1. All

the relationships are close to being linear, with no obvious bends observed. Thus, the linearity assumption of fitting a linear model of multiple regression to the hypotheses has been met.

Figure 4-1: Scatter plot of team effectiveness against vertical and shared leadership behaviors



4.4.2 Inter-correlation among study variables

For interval-scaled variables, the Pearson correlation coefficient was used to indicate the bivariate relationships, include the direction, strength and significance, of the studied variables (Cavana et al., 2001).

Table 4-15 lists all the bivariate relationships between variables studied in this research. All variables show positive correlations with each other at the 1% significance level (2-tailed), except for team size, which shows no significant relationships with others. The correlations among the vertical directive, transactional, transformational and empowering leadership are very strong, ranging between 0.88 and 0.94. Similarly, the correlation among the shared directive, transactional, transformational and empowering leadership are also very high, in the range of 0.89 to 0.93. Relatively, the correlations between the four types of vertical leadership and the four types of shared leadership are weaker, in the range of 0.72 to 0.84. These results show that multi-collinearity may be present among vertical leadership behaviors and among shared leadership behaviors. Mason and Perreault (1991) stated that problems may arise but that overall prediction is not affected in a collinearity situation.

> "Problems may arise when two or more predictor variables are correlated. Overall prediction is not affected, but interpretation of and conclusions based on the size of the regression coefficients, their standard errors, or the associated *t*-tests may be misleading because of the potentially confounding effects of collinearity." (Mason and Perreault, 1991)

Therefore multiple regression can still be used to test the hypotheses, but caution should be exercised when considering the regression coefficients. "Higher collinearity interacts with a small sample or low R^2 to produce substantial inaccuracies in estimated coefficients" (Mason and Perreault, 1991).

Salesperson ratings of team effectiveness have quite a strong positive correlation with the eight types of leadership, between 0.81 and 0.88 with vertical transactional

leadership being the lowest and vertical transformational and empowering leadership the highest.

On the other hand, the shop managers' ratings of the team effectiveness have a weaker positive relationship with these leadership types, ranging from 0.41 to 0.56. Similar to the case of the salesperson ratings, vertical transactional leadership has the lowest correlation with team effectiveness. The highest correlation is with shared empowering leadership.

Table 4-12: Inter-correlations among studied variables

	Team size	**Vertical Directive**	**Vertical Transactional**	**Vertical Transformational**	**Vertical Empowering**	**Shared Directive**	**Shared Transactional**	**Shared Transformational**	**Shared Empowering**	**Salespersons rating on team effectiveness**	**Shop managers rating on team effectiveness**
Team size	1.00										
Vertical Directive	0.25	1.00									
Vertical Transactional	0.28	0.91**	1.00								
Vertical Transformational	0.29	0.94**	0.94**	1.00							
Vertical Empowering	0.25	0.88**	0.91**	0.94**	1.00						
Shared Directive	0.10	0.80**	0.73**	0.77**	0.75**	1.00					
Shared Transactional	0.17	0.79**	0.79**	0.79**	0.80**	0.92**	1.00				
Shared Transformational	0.14	0.76**	0.78**	0.78**	0.84**	0.89**	0.90**	1.00			
Shared Empowerment	0.17	0.74**	0.72**	0.75**	0.79**	0.92**	0.93**	0.92**	1.00		
Salespersons rating on team effectiveness	0.27	0.87**	0.81**	0.88**	0.88**	0.85**	0.84**	0.85**	0.84**	1.00	

Shop managers rating on team effectiveness	-0.02	0.51**	0.41**	0.50**	0.47**	0.55**	0.48**	0.55**	0.56**	0.54**	1.00

Note: ** Correlation is significant at the 0.01 level (2-tailed).

4.4.3 Hypothesis 1 testing

Hypothesis 1: Vertical leadership will be related positively to team effectiveness, such that the more directive, transactional, transformational and empowering the shop management behaviors are, the higher the team effectiveness in the shop will be.

To test Hypothesis 1, multiple regression analysis was used. As shop size was the control variable, it was entered in the regression model in step 1. The four types of vertical leadership behaviors, that is directive, transactional, transformational, and empowering, were entered in step 2. The dependent variable, team effectiveness, was rated by both shop managers and salespersons. Therefore the regression was run twice for these two ratings. The result is presented in Table 4-16.

To understand whether vertical leadership is related positively to team effectiveness, the coefficient of determination, R^2 was used. Since shop size was used as the control variable, the change in R^2 after the effect of shop size was used to analyze the statistic. For shop managers' ratings, $\triangle R^2$ is 0.33, $F(5,37) = 3.68$, $p = 0.01$. This means that 33% of the team effectiveness variance has been significantly explained by the four vertical leadership behaviors. For salespersons' ratings, $\triangle R^2$ is 0.76, $F(5,37) = 35.9$, $p = 0.00$. This indicates that 76% of the team effectiveness variance has been significantly explained by the four vertical leadership behaviors, much higher than shop management rating. Both results support that vertical leadership is positively related to team effectiveness.

However, when reviewing the beta weights of the four vertical leadership behaviors, it can be seen that not all are significantly related to team effectiveness. Beta weights are

the standardized coefficients of the regression model, indicating the relative importance of the independent variables to the dependent variable (Cooper and Emory, 1995). There is no one vertical leadership behavior significantly related to team effectiveness from shop management ratings. From the frontline salesperson ratings, vertical directive (β =0.44, p<0.05) and vertical empowering (β =0.51, p<0.05) behaviors have positive significant relationships with team effectiveness but vertical transactional behavior (β =-0.37, p<0.10) has a negative significant relationship. No significant relationship was found between vertical transformational behavior and team effectiveness.

Therefore Hypothesis 1 is partially supported: the vertical leadership behavior explains significant amounts of variance of team effectiveness in both shop managers' and salespersons' ratings, however only vertical directive and empowering leadership behaviors show positive significant relationships, while vertical transactional leadership behavior shows a negative significant relationship in the salespersons' ratings. Vertical transformational behavior has no significant relationship with team effectiveness in either group's ratings.

Table 4-13: Hierarchical Regression Analysis of vertical leadership to team effectiveness

Step	**Independent variable**	**Team effectiveness**					
		Shop Managers rating			**Salespersons rating**		
		R^2	**$\triangle R^2$**	**Beta**	**R^2**	**$\triangle R^2$**	**Beta**
1	Shop size	0.00	0.00	-0.16	0.07*	0.07*	0.04
2	Vertical directive, transactional, transformational & empowering	0.33**	0.33**		0.83**	0.76**	
	- Vertical Directive			0.49			0.44**
	- Vertical transactional			-0.62			-0.37*
	- Vertical transformational			0.49			0.33
	- Vertical empowering			0.18			0.51**
	F	F(5, 37)=3.68, p=0.01			F(5, 37)=35.90, p=0.00		

Note: *p < 0.10; ** p < 0.05

This result indicates that vertical leadership is an important predictor for team effectiveness. A significant amount of team effectiveness variance is explained by vertical leadership. However, among the four types of leadership behaviors, directive and empowering behaviors are significant. This means that when the appointed leader provides clear instruction and direction and then empowers the staff's self leadership and motivation to complete the task, the best performance results can be achieved. In contrast, a focus on verbal and material rewards has a negative effect on the effectiveness. The leader's vision, inspiration, challenge to the status quo, and encouraging idealism do not matter for effectiveness in the shop environment.

4.4.4 Hypothesis 2 testing

Hypothesis 2: Shared leadership will be related positively to team effectiveness, such that the more directive, transactional, transformational and empowering the team members' behaviors are, the higher the team effectiveness in the shop will be.

As with Hypothesis 1, multiple regression was also used to test Hypothesis 2, with vertical leadership replaced by shared leadership as the independent variable. The four shared leadership behaviors are shared directive, transactional, transformational and empowering leadership behaviors. Shop size was input in the first step and the four shared leadership behaviors entered in the second step. Two separate regressions were run for shop managers' ratings and salespersons' ratings for team effectiveness. The results are listed in Table 4-17.

The change in R^2 is 0.36 with F(5,37)=4.24, p=0.00 for shop managers' ratings. This means that 36% of the team effectiveness variance is significantly explained by the four shared leadership behaviors. For salespersons' ratings, $\triangle R^2$ is 0.72, F(5,37) = 28.81, p = 0.00, indicating that 72% of the team effectiveness variance is significantly explained

by the four shared leadership behaviors, much higher than the shop managers' ratings. Both results support that shared leadership is related positively to team effectiveness.

Again, when reviewing the beta weights of the four shared leadership behaviors, not all are significantly related to team effectiveness. There is no shared leadership behavior significantly related to team effectiveness from the shop managers' ratings. For the salespersons' ratings, shared directive (β =0.43, p<0.10) and shared transformational (β =0.38, p<0.10) behaviors have positive significant relationships with team effectiveness but shared transactional and empowering have no significant relationships with team effectiveness.

Therefore Hypothesis 2 is only partially supported: the shared leadership behaviors explain significant amounts of variance in team effectiveness in both the shop managers' and salespersons' ratings, however only shared directive and transformational leadership behaviors show positive significant relationships in the salespersons' ratings.

Table 4-14: Hierarchical Regression Analysis of shared leadership to team effectiveness

Step	**Independent variable**	**Team effectiveness**					
		Shop Managers rating			**Salespersons rating**		
		R^2	**$\triangle R^2$**	**Beta**	**R^2**	**$\triangle R^2$**	**Beta**
1	Shop size	0.00	0.00	-0.08	0.07*	0.07*	0.16**
2	Shared directive, transactional, transformational & empowering	0.36**	0.36**		0.80**	0.72**	
	- Shared Directive			0.37			0.43*
	- Shared transactional			-0.53			0.06
	- Shared transformational			0.32			0.38*
	- Shared empowering			0.43			0.02
	F	F(5, 37)=4.24, p=0.00			F(5, 37)=28.81, p=0.00		

Note: *p < 0.10; ** p < 0.05

This result implies that shared leadership is an important predictor for team effectiveness in the retail shop environment. It can explain a significant amount of variance for team effectiveness. Among the four leadership behaviors, shared directive and transformational behaviors have significant impact on team effectiveness. This means that clear instructions and goals, together with vision, inspiration, challenge to the status quo and encouraging idealism behaviors among team members, can result in better team effectiveness. To the contrary, shared transactional and empowering behaviors such as verbal and material rewards, self reward, self leadership, and participative goal setting may not be significant for team effectiveness.

4.4.5 Hypothesis 3 testing

Hypothesis 3: Shared leadership will be more important than vertical leadership in predicting team effectiveness.

With both vertical and shared leadership shown to be significant in explaining the variance of team effectiveness, the third hypothesis involved analysing which one is the more important predictor. Hierarchical regression analysis was used to determine the relative usefulness of vertical and shared leadership (Pearce and Sims, 2002). This was done by changing the order of entry for the vertical and shared leadership in examining the team effectiveness of the respective ratings. Then the change in R^2 was compared, to understand if significant additional variance is explained with the additional leadership type. The result is shown in Table 4-18.

Specifically, shop size was entered in step 1 as the control variable. Four vertical leadership behaviors were entered in step 2 and then four shared leadership behaviors in step 3 to examine against the shop managers' ratings for team effectiveness. The change in R^2 is not significant when adding the four shared leadership behaviors in step 3. With the sequence of entering vertical and shared leadership reversed, the change in R^2 is

also not significant when adding the four vertical leadership behaviors after the shop size and four shared leadership behaviors in the regression model. This is shown in the fourth column in Table 4-18. As a result, Hypothesis 3 is not supported from the shop managers-rated regression model.

From the salespersons' ratings of team effectiveness, adding the four shared leadership behaviors after shop size and the four vertical leadership behaviors has increased the R^2 significantly by 0.06 (p<0.05). Specifically, shared leadership behaviors account for an additional 6% of the variance in retail shop team effectiveness. When the entry sequence of vertical and shared leadership behaviors was reversed, the change in R^2 was found to be 0.09 (p<0.05). This illustrates that the vertical leadership behaviors account for an additional 9% of the variance in retail shop team effectiveness. In comparing the additional explanation of the variance in these two orders, vertical leadership behaviors account for a larger amount of variance in retail shop team effectiveness, beyond the control variable and the shared leadership behaviors. As a result, hypothesis 3 is rejected.

Therefore, while both vertical and shared leadership are related positively to team effectiveness in retail shops in Hong Kong, vertical leadership is marginally more important than shared leadership. Hypothesis 3 is rejected, demonstrating that shared leadership is not more important than vertical leadership in predicting team effectiveness in Hong Kong's retail shop environment. In this contextual situation, frontline sales staff do prefer more leadership from the appointed shop manager than from team colleagues.

Table 4-15: Hierarchical Regression Analysis of the relative contributions of the four Vertical and four Shared leadership behaviors to the variance explained by the full model

Step	Independent variable	Team Effectiveness			
		Shop Management rating		Frontline Sales rating	
		R^2	$\triangle R^2$	R^2	$\triangle R^2$
1	Shop size	0.00	0.00	0.07*	0.07
2	Four vertical leadership behaviors	0.33**	0.33**	0.83**	0.76**
3	Four shared leadership behaviors	0.44	0.11	0.89**	0.06**
1	Shop size	0.00	0.00	0.072*	0.072*
2	Four shared leadership behaviors	0.36**	0.36**	0.80**	0.72**
3	Four vertical leadership behaviors	0.44	0.08	0.86**	0.09**
	F	F(9, 33)=2.88, p=0.01		F(9, 33)=29.36, p=0.00	

Note: *p < 0.10; ** p < 0.05

4.4.6 Summary

In summary, Hypothesis 1 is partially supported: the vertical leadership behaviors explain significant amounts of the variance of team effectiveness in both shop managers' and salespersons' ratings, however, only vertical directive and empowering leadership behaviors show any positive significant relationship, while vertical transactional leadership behavior shows a significant negative relationship in the salespersons' ratings.

Hypothesis 2 is also partially supported: the shared leadership behaviors explain significant amounts of the variance of team effectiveness in both the shop managers' and salespersons' ratings, however, only shared directive and transformational leadership behaviors showed significant positive relationships in the salespersons' ratings.

Hypothesis 3 is rejected; shared leadership is not more important than vertical leadership in predicting team effectiveness. In fact, vertical leadership is marginally more important than shared leadership.

The finding that both vertical and shared leaderships are significantly related to team effectiveness is aligned with most of the overseas studies in this area (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006, Carson et al., 2007, Hoch et al., 2010, Manz et al., 2010, Small and Rentsch, 2010). Various results comparing the contributions of the four types of leadership behaviors, directive, transactional, transformational, and empowering, were also observed in the previous studies (Pearce and Sims, 2002, Pearce et al., 2004, Burke et al., 2006, Ensley et al., 2006).

However, when comparing whether vertical or shared leadership is more crucial for team performance, all of the overseas studies showed that shared leadership is more important (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006), while this research has shown the opposite. Vertical leadership was found to be more important than shared leadership in this research. This may be due to the difference in team natures, such as organization structure, management practice, team proximity, maturity, and also the national cultures of the cities studied. More discussion will be shared in Chapter 5.

4.5 **Chapter conclusion**

This chapter began with a description of the data collected and the descriptive statistics, followed by the reliability of the data. With the high construct validity, Cronbach's alpha coefficient and within shop interrater reliability, the data were shown to have good inter-item consistency and support for aggregation to group level study. Finally the chapter has described the results of testing the hypotheses using regression analysis.

Hypotheses 1 and 2 are partially supported but Hypothesis 3 is rejected. Both vertical and shared leadership behaviors are related positively to team effectiveness in retail shop management in Hong Kong. However, contrary to the study in the United States, shared leadership was not found to be more important than vertical leadership for team effectiveness. A detailed discussion and recommendations will be shared in the next chapter.

5. Chapter 5: Discussion and Recommendations

In this chapter, a detailed discussion is presented of the findings described in Chapter 4. This is followed by the implications for theory and practice. The limitations of this research are discussed from five dimensions. Finally some recommendations are made for future studies and the thesis conclusion is presented.

5.1 Discussion of the findings

The objective of this research was to investigate whether vertical and shared leadership are important to the management of retail shops in Hong Kong, and which has the higher impact. The purpose of answering these questions was to provide insights for the retail industry about managing, training, and retaining staff in this high-growth industry in Hong Kong. This section will discuss the findings of this research and answer the research questions.

5.1.1 Impact of shared leadership

The results illustrate that both vertical and shared leadership are important for team effectiveness. Both can explain a significant amount of variance for team effectiveness, 76% and 72% for vertical and shared leadership behaviors respectively from the salespersons' rating. These results echo previous studies of the impact of vertical and shared leadership on team effectiveness (Pearce and Sims, 2002, Ensley et al., 2006, Carson et al., 2007, Hoch et al., 2010, Small and Rentsch, 2010). In addition, both Cox et al. (2003) and Houghton et al. (2003) suggested that vertical and shared leadership supplement each other instead of one needing to be replaced by the other.

The positive impact of shared leadership is in-line with other empirical quantitative research studies (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006). The importance of shared leadership for these retail shops can be explained from three dimensions. First, the frontline staff seek more autonomy at work. As informed by the

Human Resource Manager of this mobile communications company, all of the frontline staff have finished secondary school and some have university certificates. They have also been trained with customer handling skills and certain technical skills. Therefore they are knowledgeable and skillful in handling their assigned jobs and dealing with customers. Naturally, they are being described as the knowledge workers who would like more autonomy (Wolff et al., 2002) in handling customer inquiries and providing solutions and recommendations to customers, as well as having some leadership roles in their specialized areas. This supports and encourages the shared form of leadership within the retail shops.

Second, the increased complexity of work calls for more shared roles and responsibilities (Day et al., 2004, Pearce, 2004). This company offers a wide range of mobile solutions to the clients, including voice and data connectivity, cross-border solutions, mobile phones and laptop devices and many other value-added services, so it is impossible for a single person to be familiar with all the information. Other than product information, staff members have to understand the company logistics and operations and be familiar with different departments in case of queries or requirement for special support. Therefore, this complexity of work also encourages the sharing of responsibilities, skills, and knowledge among team members. This is also a driving force for shared leadership (Day et al., 2004, Pearce, 2004).

Finally, faster and higher expectations from customers push for more interdependence and shared support among team members (Perry et al., 1999). Nowadays, in shop environments, customers expect immediate responses from the sales persons; otherwise, they will leave for other shops. As a result, the sales persons normally do not have time to consult the shop managers, or the shop managers may not be around when a need arises. Team members have been observed giving hands to each other to fulfill customers' expectations. Therefore interdependence among team members is high and leadership is best shared (Manz et al., 2010).

As a conclusion, the knowledge of the frontline staff, the complexity of work and customers' expectations are the driving forces for more shared leadership in Hong Kong's retail shop environment.

5.1.2 Impact of vertical leadership

For vertical leadership, diverse results were observed in previous empirical research. Vertical leadership was found to be non-significant to team outcomes in a virtual team of social workers studying in an education program in the United States (Pearce et al., 2004). Nevertheless, it was related positively to team effectiveness in change management work teams in an automotive manufacturing firm (Pearce and Sims, 2002) and new venture top management teams (Ensley et al., 2006) in the United States. In this research, vertical leadership was also found to be related positively to team effectiveness in the retail shop environment. A summary is presented in Table 5-1.

The commonality of the three positively related studies is that they were all carried out in the real business environment, whereas Pearce et al. (2004) focused on virtual teams in an education program. In a study environment, teams are formed to complete certain assignments. The vertical leader is normally selected democratically by team members or assigned by the lecturer. He or she does not actually carry crucial authority in appraising, rewarding, allocating jobs and promoting staff, as in the real business environment. Furthermore, the key role of the vertical leader may simply be as a bridge between the team and the lecturer and within-team coordination. Therefore the importance of vertical leadership is relatively low and shows no significance to team performance. Compared to the role of the vertical leader in the real business situation, it is much reduced.

Table 5-1: Summary of empirical studies on the impact of vertical and shared leadership on team performance or team effectiveness

Research	Target		Vertical Leadership					Shared Leadership					Shared leadership more important?
			Overall	Directive	Transactional	Transformational	Empowering	**Overall**	Directive	Transactional	Transformational	Empowering	
(Pearce and Sims, 2002)	Team effectiveness in change management teams in automotive manufacturing firm	Self rating	**+**	0	0	+	0	**+**	0	0	+	+	Y
		Manager rating	**+**	-	0	+	0	**+**	-	0	+	0	Y
		Customer rating	**+**	0	0	0	0	**+**	-	0	+	0	Y
(Pearce et al., 2004)	Team outcomes in social workers virtual teams during an education program, self rating on	Potency	**0**	0	0	0	0	**+**	+	0	+	+	Y
		Social integration	**0**	0	0	0	0	**+**	+	+	+	+	Y
		Problem solving quality	**0**	0	0	0	0	**+**	0	+	0	+	Y
		Perceived effectiveness	**0**	0	0	0	0	**0**	0	+	0	+	0
(Ensley et al., 2006)	Company performances in new venture top management teams		**+**	+	+	-	-	**+**	+	+	+	+	Y
This research	Shop effectiveness in mobile service retail shops in HK	Salespersons rating	**+**	+	-	0	+	**+**	+	0	+	0	N
		Sales Managers rating	**+**	0	0	0	0	**+**	0	0	0	0	0

Annotation:

- \- : significantly negatively correlated
- \+ : significantly positively correlated
- 0 : no significance
- Y : Yes
- N : No

In the business environment or in supporting shared leadership within a team, leaders have many roles to play, such as team design, boundary management, training and development of staff, resource allocation, and forming reward and cultural systems, as stated in Pearce's (2004) article. This is especially true for retail businesses when the frontline staff are normally very busy dealing with customer inquiries and promoting products, so that lots of the coordination and planning work may rest on the vertical leaders' shoulders. The shop managers normally take up the roles of setting staff rosters, monitoring performance achievement, coaching staff, aligning resources and support for frontline staff, channeling staff and customer feedback to the senior management, and some other functions to ensure the smooth operation of the shops. As a result, the impact of vertical leadership is obvious and significance to the team effectiveness in these three earlier studies performed in the real business environment.

In addition, the organization on which this study focused employs a centralized management approach. Most of the decisions, including the formation of strategies, deciding the work flow, setting the reward and commission systems and training and development of staff, are decided by the senior management in the office. Shop managers and senior management will have weekly or biweekly meetings to share these decisions. Comments and feedback from shop managers are collected during these meetings. Nevertheless, the final decision still rests with the senior management. Therefore, the staff in this company may get used to this "dictating" culture and rely on the vertical leaders' directions and instructions, which may be why vertical leadership was found to be related positively to team effectiveness in this study.

5.1.3 Vertical versus shared leadership

When using hierarchical regression analysis to assess the relative usefulness of vertical and shared leadership, the former was found to account for a more significant amount of variance in retail shop team effectiveness. The increase in R^2 is just 0.06 [$F(9,33) = 29.36$, $p = 0.00$] for shared leadership after the shop size and vertical leadership entry.

However, the increase in R^2 for vertical leadership is 0.09 [$F(9,33) = 29.36$, $p = 0.00$]. Therefore hypothesis 3 is rejected: shared leadership is not more important in predicting team effectiveness than vertical leadership in the retail shop environment in Hong Kong.

This result is different from other empirical research conducted in the United States. All of the previous studies have shown shared leadership to be more impactful than vertical leadership in terms of team effectiveness or performance outcomes (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006). The result is summarized in the last column of Table 5-1. These studies investigated the relative importance of shared and vertical leadership in team setting: new venture top management (Ensley et al., 2006); social worker virtual teams from various non-government organizations during an education program (Pearce et al., 2004); and change management teams in an automotive manufacturing firm (Pearce and Sims, 2002). The following paragraphs will try to explore the reasons for this difference in two dimensions: management practice and company's organizational structure.

5.1.3.1 Management practice

The first difference between this research and the other three studies in the United States (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006) is the management practice and the subordinates' expectations of the management.

Most of the population in Hong Kong is Chinese. Chinese people have been influenced by Confucian philosophy for thousands of years. This philosophy focuses on leaders displaying authoritarianism, benevolence, and moral leadership (Cheng et al., 2004). "Authoritarianism refers to a leader's behavior that asserts absolute authority and control over subordinates and demands unquestionable obedience from them. Benevolence means that the leader's behavior demonstrates individualized, holistic concern for the subordinates' personal or familial wellbeing. Moral leadership can be depicted broadly as a leader's behavior that demonstrates superior personal virtues, self-

discipline, and unselfishness." (Cheng et al., 2004, p.91). Cheng et al. explained that in Confucian philosophy, the senior person has the higher authority. For example, the most elderly person in the group should be consulted when settling a dispute; a younger person in the group is believed not to be knowledgeable enough to work independently and should obey and respect the senior persons; it is a virtue to learn from the elders and the best way to avoid mistakes.

With the influence of this tradition of obeying the elderly and experienced, one can believe that the management practice in Hong Kong will be more authoritative, balanced with benevolence and moral integrity and that the subordinates will follow instructions willingly. This characteristic supports the higher impact of vertical leadership on team effectiveness.

This explanation can also be supported by Hofstede's (1983) national cultural study. He found that Hong Kong is a city with a very low uncertainty avoidance level (index 29, ranked 4 to 5 out of 50 countries) and high power distance level (index 68, ranked 37 or 38 out of 50 countries). Uncertainty avoidance "indicates the extent to which a society feels threatened by uncertain and ambiguous situations and tries to avoid these situations by providing greater career stability, establishing more formal rules, not tolerating deviant ideas and behaviors, and believing in absolute truths and the attainment of expertise" (Hofstede, 1980b). Power distance "indicates the extent to which a society accepts the fact that power in institutions and organizations is distributed unequally" (Hofstede, 1980b). High power distance is concerned about who has the power; the one with power can behave more autocratically in order to be effective, while a low power distance encourages participative management and industrial democracy in leadership and decentralization in the organizational structure.

For a culture with a high power distance and weak uncertainty avoidance, like Hong Kong, Hofstede described "personnel bureaucracies" with "father-type manager[s]" who have unquestioned authority. Subordinates in this quadrant feel comfortable with

autocratic management approaches and prefer formal rules and specializations. As a result, the vertical leadership approach is welcomed and appreciated by the staff in the Hong Kong retail operation involved in this study. This can explain why vertical leadership is more important than shared leadership. Support for this argument comes from the suggestion that "shared leadership may be extremely rare in high power distance culture" (Conger and pearce, 2003).

On the contrary, United States is dominated with a low power distance (index 40, ranked16 out of 50 countries) and low uncertainty avoidance (index 46, ranked 11 out of 50 countries) according to Hofstede's study of cultural differences among nations (1983). The United States falls into the quadrant of small power distances and weak uncertainty-avoidance tendencies, which means a tendency to "sympathy for decentralized and flexible structures, such as participative management and matrix organization" (Hofstede, 1983). Therefore participative decision making and empowering autonomy is the preferred management practice in the United States. This is aligned with the concept of shared leadership, which emphasises the collaborative contribution of the team for the sake of team performance instead of relying on the appointed team leader. As a consequence, it is reasonable to accept that the positive effect of shared leadership on team performance and effectiveness is generally observed in the United States.

In conclusion, whether vertical or shared leadership is more important for team effectiveness may be influenced by the management practice and the expectations of the subordinates. Therefore more studies on the mediating or moderating effects of shared leadership are recommended for future research.

5.1.3.2 Difference in organizational structure

The second perspective in explaining the difference between the outcomes of this research and the others is a company's organization structure. According to Jackson's

(2000) recommendation, decentralized organizational structure and a balance of staff autonomy, managerial guidance, collaborative decision making and individual accountability are core characteristics to serve the flourish of shared leadership. He defined shared leadership "as a management model based on the shared governance philosophy". Therefore organizational structure does determine the sustainability of the shared leadership behaviors.

In the three United States studies (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006), the organizational structures were mainly decentralized and the teams were empowered with decision-making power and were accountable for the results. Thus shared leadership was found to be prominent and supported. In contrast, the company that participated in this research has adopted a centralized approach. Clear rules and regulation, defined training and development programs, specific operational procedures, top-down commission systems and many other processes are governed by the senior management team. The delegation released to the frontline sales staff is limited. Therefore, this may be a reason why vertical leadership is more important than shared leadership in this company. The following paragraphs will explore the organizational structures of these four cases in detail.

In Pearce's and Sim's (2002) study of change management work teams, they described the teams as highly independent, cross-functional teams and semi-permanent. Members of the teams demonstrate advanced forms of empowerment and considerable autonomy, with diverse skills from different workforces within the company. This description matches the core characteristics of decentralization and the balance of staff autonomy, managerial guidance, collaborative decision making and individual accountability requirements for supporting shared leadership, reported in Jackson's article (2000).

Similarly, in the study by Pearce et al. (2004) of social worker teams, the participants were involved in an action-learning project as part of an educational program. Team members were from different geographical locations. In their ten weeks of completing

the project, they communicated via email, groupware, fax, and telephone. There was hardly any structure governing the team. The team members were dispersed in different locations and communicated only virtually. Their work was done in a decentralized situation and with high autonomy and accountability of the results, which encouraged the predominance of a shared form of leadership.

For the studies on new venture top management carried out by Ensley et al. (2006), shared leadership was more important. On average, the studied companies had been formed for 6.8 and 4.3 years respectively in the two studies, thus being relatively young compared to those studied in other research. As described by Clark (1994), new organizations normally adopt informal structures with entrepreneurial, individualistic, creative, and ownership by leaders and core team members. This is a likely match with the core characteristics described in Jackson's (2000) article that supported shared leadership to be preeminent.

On the contrary, the company participating in this research uses a centralized structure and top-down management approach. All the decisions, processes, policies and rules are designed centrally by the senior management. Frontline staff can voice their concerns and ideas via shop managers during the regular meetings with senior management but may not be able to influence any final decisions. Staff members have autonomy in dealing with the customers but not in setting the company's standards, rules, policies, strategies, and most of the decisions. Therefore, according to Jackson's requirements, shared leadership may not be able to flourish or to get support. Without the senior management's support in establishing the appropriate structure and culture, the influence of shared leadership is less than that of vertical leadership in this company (Pearce, 2004).

5.1.4 Analysis of significance of leadership behaviors

Among the four vertical and four shared leadership behaviors, vertical directive, vertical empowering, shared directive, and shared transformational behaviors have positive significance for team effectiveness. Vertical transactional behavior, on the other hand, has a negative relationship with team effectiveness.

Frontline staff prefer more direct instruction and guidelines for fulfilling the team's goal, no matter whether this is from the appointed leader or among the team members. Then they want empowerment from the shop manager to execute the job and inspiration and stimulation from team members while executing the task. This result can be explained reasonably as the frontline staff have to face the customers alone most of the time while the shop is open. Having clear directions and instructions provides guidance when they are selling, explaining, helping and servicing the clients, especially to help them to avoid over-selling or over-committing (Wallace et al., 2011). In addition, the communication among team members and shop managers has to be short and precise, as their conversations may be interrupted by incoming clients and other operational issues within the shop. Therefore, directive behaviors are mostly preferred in this type of situation with high efficacy of frontline sales (DeRue et al., 2010). Once they know the clear content and instructions, they have to be delegated to deal with customers independently. This is important in the shop environment, as customers do not have the patience to wait and it is not professional to consult the shop manager too frequently. Therefore, empowering behavior from the shop manager is crucial for the effective handling of customer inquiries, demonstrating professionalism, and gaining confidence to close deals with customers (Srivastava et al., 2006). When they face objections from customers or just observe some unreasonable directions, they have the confidence to challenge the status quo, inspire new ideas and methods to deal with the situation, and provide vision among team members (Lowe et al., 1996, Judge and Piccolo, 2004). That is the reason why shared transformational behavior is significant for shop effectiveness. The intelligence for solving immediate objections, crises and other business issues in the shop is shared among the team members.

In contrast, the relation between vertical transactional behavior and team effectiveness, including contingent material and personal rewards, was not supported by this research. This may have been due to the fierce competition in the mobile service industry. The company's profit margin is thinner and thinner and the commissions for frontline sales staff can only be within a certain range and may even decrease. Therefore, material rewards cannot be used to motivate these staff members (Lowe et al., 1996). Also, there may not be time to express personal appreciation in the tight and busy shop working environment. As a result, vertical transactional behavior was found to be related negatively to shop effectiveness. This result reflects the conclusion of the meta-analysis done by Burke et al. (2006) that "transactional leadership behaviors were not significantly related to perceptions of team effectiveness".

5.2 **Implications for theory and the researcher**

This research contributes to the area of leadership study in two ways. One contribution is to the area of vertical and shared leadership, while the other is related to effective leadership behaviors outside the transactional-transformational paradigm.

5.2.1 Vertical and shared leadership

This research has extended the literature about the effects of vertical and shared leadership on team effectiveness in Hong Kong, specifically in retail shop teams. Shared leadership has attracted the attention of researchers in western countries, mainly the United States, in the past decade. However, no research has been found for Hong Kong or other Asian contexts. Therefore the first contribution of this research is that it has tested the generalisability of the previous United States research to the context of Hong Kong.

Similar to most of the previous studies, both qualitative (Jackson, 2000, Williams et al., 2002, Manz et al., 2010) and quantitative (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006, Carson et al., 2007, Hoch et al., 2010, Small and Rentsch, 2010), shared leadership was found to have a positive influence on team effectiveness in this study of Hong Kong retail shop management. With the increase in complexity of the work, more and more knowledge workers who seek more autonomy, along with higher customer expectations, the shared form of leadership is becoming popular and increasingly important for team effectiveness.

However, this new trend of leadership is not as important as vertical leadership. Vertical leadership still plays a dominant role in retail shop management in Hong Kong. While western studies of vertical leadership show diverse results, ranging from non-significant to positively related to team effectiveness, in Hong Kong it was found to be positively significant to team effectiveness. In fact, it was shown to be more important than shared leadership, contrary to the western studies, which showed shared leadership to be more important and impactful than the traditional vertical leadership. This may be due to the difference in management practice between western and eastern countries and the differences in the organizational structures of the organizations sampled. In the United States, where most of the shared and vertical leadership research was conducted, the managers encourage participative decision making and autonomy in achieving the tasks, and consequently support for shared forms of leadership flourishes (Pearce and Sims, 2002). However, in Asian countries, the Confucian tradition (Cheng et al., 2004) and high power distance culture (Hofstede, 1983) contribute to a preference for a "father-like" autocratic management style. Teams in the United States prefer more decentralized and participative management styles and also support more shared leadership. On the contrary, the more centralized and directive style in Hong Kong leads to a preference for a more vertical leadership approach.

This finding provides a new angle for studying vertical and shared leadership in Asia. It indicates that theories established well in the United States may not simply apply to

other countries, or even to the overseas Chinese context (Westwood, 1997). It is suggested that future researchers explore the relative importance of vertical and shared leadership in difference industries and in Asian contexts to check for generalisability and replicability.

5.2.2 Effective leadership behaviors outside the transactional-transformational paradigm

In the past, the research on leadership was influenced largely by transactional-transformational leadership behavior. The present research adopted the typology developed by Pearce et al. (Pearce et al., 2003). They extended the leadership behaviors from the common transactional-transformational pair with directive and empowering behaviors. Interestingly, from this research, the leadership behaviors that appear to work the best are directive and empowering behaviors from the appointed leaders and directive and transformational behaviors among team members. Vertical transactional behavior even has a negative impact on team effectiveness. This result extends the traditional transactional-transformational paradigm of leadership study and also brings in new elements that favor the shop management.

Directive leadership behavior, which includes assigning goals and providing clear commands and instructions, seemed to be most welcomed by the staff, regardless of whether this is exerted from the appointed leaders or among the team members. In recent years, directive behavior has not been popular in the research field. However, it is possible that, in Asia or other places, different cultural situations and contextual environments may still pay an important role (Westwood, 1997). This research has uncovers this possibility and provides insights for future studies of vertical or shared directive leadership behaviors.

5.3 Implications for practice

The practical implications of this research will be presented from three perspectives: the implications of vertical and shared leadership for retail management, the effectiveness leadership behaviors for shop managers, and the training and development program for shop managers and staff.

5.3.1 The importance of vertical and shared leadership for retail management

Hong Kong is a city consisting of both western and eastern cultures. It has Chinese habits and traditions at its core, but is influenced a lot by western technologies, culture, and company management style (Cheng et al., 2004). This is reflected in this study's results about the effects of vertical and shared leadership on team performance. Both have important influences on team effectiveness, although vertical leadership was found to have a greater contribution than shared leadership. As a result, when managing retail shops, neither type of leadership should be ignored; a balance between managerial guidance and staff autonomy is required to reach a collaborative environment and to achieve the common goals (Jackson, 2000).

At the moment, vertical leadership is still being given more credit for team effectiveness in Hong Kong; however, the impact of shared leadership should not be diminished. In western countries, an overwhelming majority of studies has supported shared leadership empirically (Merkens and Spencer, 1998, Jackson, 2000, Pearce and Sims, 2002, Williams et al., 2002, Hooker and Csikszentmihalyi, 2003, Pearce et al., 2004, Ensley et al., 2006, Carson et al., 2007, Manz et al., 2010, Hoch et al., 2010, Small and Rentsch, 2010). In this study, there was only a 3% difference found in explaining team effective variance compared with vertical leadership. With more multi-national companies setting up offices in Hong Kong, together with the driving force of globalization, advancements in technologies, the growing importance of self-managing work teams, increments in knowledge workers, and higher customer expectations, shared leadership should have more impact in the future (Pearce and Conger, 2003b). Therefore, company managers

have to care about the present importance of vertical leadership, but at the same time plan for the future changes giving rise to the need for shared leadership.

Locke's (2003) integrated model of leadership, utilizing both vertical and shared leadership in managing an organization, can be a good reference. According to his suggestion, some core leadership tasks should be the responsibilities of the top person and should not be shared. These include defining the vision and core values of the company, selecting the top management team, appreciating top managers, and designing the structure of the organization. Locke did not mean that the top leader should not listen to the input from his or her staff, partners or other stakeholders; however, he/she should always have the final decision, especially when some input may be contradictory or at odds with the organization's needs. On the other hand, some activities should be shared among middle management and even at the working level. These include the selection and training of lower level personnel, motivation across different levels, building up the team and morale, and encouraging information sharing.

5.3.2 Required leadership behaviors for retail shop managers

This research went further, to investigate what leadership behaviors are significant for team effectiveness in a shop environment. Interestingly, the popular transactional-transformational behaviors from the appointed leader were not found to be important to shop effectiveness. More surprisingly, vertical transactional leadership behavior was shown to be negatively related, with vertical directive and empowering behaviors favoring team performance. This finding sheds new light on the existing management approach to retail shop operation.

Transactional behavior from the appointed leaders, which focuses on material and personal rewards, does not appear to be appreciated by the frontline staff (consistent with Burke et al., 2006); neither do the visionary and inspiratory behaviors of the transformational approach have an effect on the staff. Instead, more directive

instructions and guidelines are welcomed and appreciated by the frontline staff, then followed by empowering self leadership, participative goal setting, and self reward (DeRue et al., 2010). These results are aligned with the studies of paternalistic leadership for overseas Chinese people by Westwood (1997) and Taiwan Chinese by Cheng and colleagues (Cheng et al., 2004), which showed that "discipline and authority with fatherly concern and benevolence" is the best leadership style for Chinese people. These results provide behavioral guidance for the assigned leader to achieve the optimum performance.

For the shared leadership, directive and transformational behaviors were found to be significantly related to team performance, where transactional and empowering behaviors were not. This means that team members welcome direct instruction and guidelines, and a sharing of ideas and inspiring suggestions among themselves (Pearce et al., 2004, Ensley et al., 2006). They can also accept direct challenges to the status quo in order to reach their designated goals. When the staff appreciate and adopt these behaviors, they form the norm or culture of the shop. Shop managers play a crucial role in encouraging and forming the team spirit and shop culture (Pearce, 2004), and the results of this study suggest the norms that the staff prefer the shops to have and thus the direction for which the shop managers should set the culture.

5.3.3 Training and development program for shop managers and staff

Traditionally, leadership is considered as a person exerting influence downward to the subordinates. This research has found that leadership both from the vertical leader and shared among the team members is important for team effectiveness. Therefore, it is important for an organization to include both the vertical leaders and their staff in leadership development programs.

It is crucial for shop managers to know that both vertical and shared leadership are important in team performance, since they are the key people in supporting both. For

their own skills, it is suggested that they develop the knowledge of when to use a directive or empowering approach to fit the situational needs (Sims Jr et al., 2009, DeRue et al., 2010) and how to manifest these skills. Since they may be accustomed to taking all the lead in planning, organizing, monitoring and controlling team activities, they have to learn how to delegate their responsibilities to the teams, otherwise they may feel a loss of power and control when exercising empowerment and implementing shared leadership. It is important to explain these concepts and get their commitment to this move through training and communication (George et al., 2002, Pearce, 2004). For establishing the shared leadership environment, their role is critical in designing the team, managing the boundaries with other departments and external parties, soliciting resources, and maintaining a shared leadership culture. Pearce (2004) suggested three primary areas for training and development: 1) how to engage in responsible and constructive leadership; 2) how to receive influence; and 3) basic teamwork skills.

For the team members, shared leadership competency should also be encouraged so that they are capable of and willing to take up the shared leadership role in the team. Their willingness to stand out, to take accountability and responsibility for the team's performance, is the key success factor for shared leadership (Pearce, 2004). The training includes systematic problem solving, collective decision-making processes, empowering others to take responsibility, negotiation for win-win outcomes, and influencing others to follow (Jackson, 2000). Research has shown evidence of decreased staff turnover, increased staff satisfaction (Williams et al., 2002), and improved patience, personal, and workplace outcomes (George et al., 2002) after participating in shared leadership training programs.

5.4 **Limitations of the research**

With constraints in the research design, resources and the tight schedule of this doctorate degree, some limitations were inevitable. These have been identified in five areas: quantitative research method, cross-sectional research design, data collection

method, common method variance, and lack of generalisability. Therefore when evaluating the contributions of this research, these limitations have to be considered.

5.4.1 Quantitative research method

This research used a quantitative methodology to examine the impact of vertical and shared leadership on the shop effectiveness of a retail company in Hong Kong. This approach has the advantage of "objective observation, precise measurements, statistical analysis and verifiable truths" (Cavana et al., 2001) to study the universal laws of human behavior. Nevertheless, when the focus is only on the objectivity, an in-depth understanding of the research subjects is overlooked: their values, their mind maps, their individual leadership styles, and belief systems are excluded. These are interesting areas to be explored to get a thorough understanding of the situation. In addition, these factors could have influenced the ways in which vertical leadership, shared leadership and team effectiveness were perceived and hence the responses to the questionnaire. As recommended by Cavana et al. (2001, p.35), "a combination of both qualitative and quantitative research designs often generates a synergistic energy which provides unique and important insights. This power is created by the fundamental difference between the two approaches – that quantitative research is based on deductive reasoning while qualitative research involves inductive reasoning." Therefore, it is recommended to complement this research with a qualitative approach to triangulate the results.

5.4.2 Cross-sectional research design

With the limited time and resources available, only a cross-sectional research design could be utilised in this research, which makes it impossible to infer the cause-effect relationships of vertical and shared leadership with team effectiveness from the findings. Instead, only the association between these variables can be deduced (Cavana et al., 2001). It is unclear whether vertical and shared leadership have symmetrical, reciprocal or asymmetrical relationships with team effectiveness (Cooper and Emory, 1995). A

symmetrical relationship means that vertical and shared leadership and team effectiveness fluctuate together. A reciprocal relationship implies that the leadership variables and team effectiveness can reciprocally influence each other. This research studied the impact of both vertical and shared leadership on team effectiveness; however, the reverse may also occur when an effective team can influence the observance of vertical or shared leadership in the team. The last relationship is an asymmetrical relationship in which the change in one variable is responsible for the changes in others. So, does the change in vertical or shared leadership impose any change in team effectiveness? This cannot be inferred from the result of this study. While these three types of relationship do have plausibility, more research with a longitudinal or ex-post facto design are required to infer the causal influence of vertical leadership, shared leadership and team effectiveness.

5.4.3 Data collection method

This research used self-administered on-line questionnaires to collect the data. The advantage of this is lower administration cost, faster response time, easier data entry and analysis, more convenience, and higher flexibility (Ilieva et al., 2002, Evans and Mathur, 2005). However, it causes potential limitations in the data collection. When the respondents have queries about the meanings of questions, they cannot or will not bother to find the researcher to understand the actual meaning. If time allows, a pilot run to understand the interpretation of the questions is preferred. “It is always desirable, if at all possible, to conduct a pilot study before administering a self-completion questionnaire” (Bryman, 2008). Bryman emphasized that a pilot study can ensure the survey questions operate well and the research instrument as a whole functions well.

5.4.4 Common Method Variance

Another possible limitation of the research may be due to the common method variance (Podsakoff and Organ, 1986) when the frontline salespersons rate both the independent

variables and dependent variables. As the measures were rated by the same person, any personal bias may have contaminated both measures. In this research, all the questions were related to the respondents' shop effectiveness and their shop managers and team members' behaviors, which may be sensitive issues. Thus there is the possibility that some might have responded with what they considered to be socially acceptable data (Mabe and West, 1982), even though it was stated clearly on the first page of the on-line web site and in the invitation email that the data collection was only for academic research and that confidentiality would be ensured. If some respondents did give socially acceptable answers, this could possibly have inflated the results.

To address this issue, the researcher tried to invite both frontline staff and managers to rate team effectiveness. More ratings from different stakeholders, such as customers and other departments, could also be invited to evaluate the leadership styles and performance of the retail shops, to eliminate the common method variance and in-group bias (Gladstein, 1984, Tsui, 1984).

5.4.5 Lack of generalisability

Generalisability is about "the applicability of the research findings in one organizational setting to other settings" (Cavana et al., 2001, p.31). In this research, the ability to generalize the findings may be limited because the focus was on only one company and one type of team, retail shop teams in Hong Kong. These teams have their specific characteristics and organizational cultures that may be different from other companies. Of course the contextual issues, such as organizational culture, process, rules and regulations, were controlled, but still the generalisability to other organizations with different contextual situations or geographic locations may be limited. As a result, caution should be exercised when generalizing the findings to other settings. More research in different countries, industries and types of companies can extend the generalisability of these results.

5.5 Recommendations for Future research

The research in shared leadership is still in its infancy (Pearce et al., 2008), so many future studies are needed to explore thoroughly the impact on team effectiveness. Some future research areas discussed in this section include running longitudinal research to examine the causal relationship between vertical and shared leadership on team effectiveness, using wider methods to measure the impact of shared leadership on teams, applying both objective quantitative elements and more ratings from different parties to measure team effectiveness, including other situational and contextual factors that may affect the relationship between shared leadership and team effectiveness, and repeating the research in other organizational contexts. A detailed discussion of these is presented in the following paragraphs.

5.5.1 Longitudinal research design

Vertical and shared leadership were found to be positively correlated in the study and their impacts on team effectiveness were also found to be significant. Nevertheless, the causal relationship between the two leadership models cannot be shown. The situation can be explained from-two competing angles. The first one is based on social cognitive theory (Bandura, 1988), that the assigned leader is performing well in leading the team and thus becomes a role-model for the subordinates to follow and imitate (Rich, 1997). The other angle is explained by the substitutes for leadership model (Kerr and Jermier, 1978), that the leader's contribution is not significant and can be substituted by the subordinates. Team members in this situation take up the shared leadership approach and lead the team to achieve. Both perspectives can provide a plausible explanation for the findings of this research. In order to explain this causal relationship, a longitudinal design to understand the impact over time is recommended for future research.

5.5.2 Measuring of shared leadership

This research adopted a dual response format to rate vertical and shared leadership, that is the frontline staff rated the leadership behaviors of the appointed leader and the team members as a whole with the same questions. This measure has the advantage of providing a big picture of the situation, and the results can be compared easily between vertical and shared leadership.

However, the drawback is that each team member had to evaluate the team members' behaviors as a whole. It is unclear how these ratings came out. Were they really averaging the performance of the team members, or simply identifying the most visible and vocal member as a reference? Therefore, how the "average team members' leadership behaviors" were perceived and interpreted may have caused bias in this measuring method. In addition, this averaging approach provides no information about how and to what extent individual team members influence each other within a team. Thus this research can be extended by using another methodology, such as the social network method (Mehra et al., 2006, Gockel and Werth, 2010), to examine the amount and distribution of shared leadership within teams. Sociograms can be drawn to visualize the shared influence effect.

5.5.3 Measuring of team effectiveness

The team effectiveness measure in this research was drawn from a broad array of dimensions and then grouped together to form one dependent variable. The instrument was completed by the frontline staff and their shop managers. According to Ancona and Caldwell (1992), more ratings can be collected from various parties such as customers and peers from other departments in order to lower the common method variance (Podsakoff and Organ, 1986) and in-group bias (Gladstein, 1984, Tsui, 1984).

In addition to the subjective ratings, other objective measures can be included to analyze team effectiveness; these can include sales volume, profitability, new customer acquisition, or the shops' staff turnover rates (Perry et al., 1999).

5.5.4 Other contextual factors affecting the relationship between shared leadership and team effectiveness

A variety of contextual factors in teams can influence the relationship between shared leadership and team effectiveness. For example, in a more mature team, shared leadership is speculated to be more potent in influencing team effectiveness (Littlepage et al., 1997). This is because team members have the time to develop friendships and understand each other's strengths and expertise. Therefore more research can be done to explore the impact of other conditions and contextual factors on the relationship of shared leadership and team effectiveness. These factors can include team member skills, team member familiarity, team member proximity, team maturity, team diversity, and team size (Perry et al., 1999)

5.5.5 Repeat in other organization contexts

Shared leadership was found to be positively related to team effectiveness in the retail shop studied in Hong Kong, but not more important than vertical leadership. This finding supports the presence of an alternative source of leadership in this company and provides good insight for practical applications and theoretical research. However, this was only examined in one company in Hong Kong, and cannot be generalized to other companies or other locations with different organizational contexts or national cultures. Especially since the importance of vertical and shared leadership to team effectiveness is different from the results found in the United States (Pearce and Sims, 2002, Pearce et al., 2004, Ensley et al., 2006), it is recommended to repeat the research in more companies in different countries. As suggested by Anastas and MacDonald (1994, p.277-278), "replication of single-system studies is the best means for demonstrating

the applicability of the results even though each successive case is still treated as an individual".

5.6 **Thesis Conclusion**

Nowadays, with the fast changes in technology, customer expectations, competitive situations, economic and political situations, and globalization of business, it is unrealistic for a single leader to know everything that is related to every dimension of a business. A share mode of leadership and processes is necessary to achieve the desired objectives. This research has investigated the impact of the traditional vertical leadership and the emerging shared leadership on team effectiveness in a retail shop in Hong Kong.

This research used a positivism approach and quantitative research to study a mobile operator's retail shops in Hong Kong. The results show that both vertical and shared leadership are significantly related to team effectiveness, while vertical leadership has a greater impact than shared leadership.

This research has extended the present study of shared leadership to Hong Kong, in particular the retail shop context. In addition, the finding that vertical leadership is more important than shared leadership sheds a new perspective for researchers to understand the adoption of shared leadership in different contextual situations. The findings also support the retail shop management team to design their management approaches and behaviors better for shop effectiveness. Of course, appropriate training and development programs can be designed to fit these purposes.

Nevertheless, like other empirical research, there are some limitations in this study. The quantitative research design limited the in-depth exploration of the results. The cross-sectional design makes it impossible to understand the cause-effect relationships among the studied variables. The use of self-administrated on-line questionnaires may not be

sufficient to clarify the meanings of the questions to the respondents. Sensitive survey questions may lead to respondents giving socially desirable answers instead of objective input. The study of only one company in Hong Kong limits the generalisability of this research.

Further research is suggested to overcome some of the limitations and advance the study of shared leadership. These include running longitudinal research to examine the causal relationship between vertical and shared leadership on team effectiveness, using wider methods to measure the impact of shared leadership on teams, applying both objective quantitative elements and more ratings from different parties to measure team effectiveness, including other situational and contextual factors that might affect the relationship between shared leadership and team effectiveness, and repeating the research in other organizational contexts.

In conclusion, this research has generated significant implications for the study of vertical and shared leadership in the academic arena as well as useful insights about retail shop management for the Hong Kong retail industry.

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Appendix 1: Participant Information Statement

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Information Statement for Research Project:
"Exploring the implications of vertical and shared leadership for team effectiveness"

You are invited to participate in the research project identified above which is being conducted by Eunice Chen Sui-yi from the Faculty of Business and Law at the University of Newcastle, NSW, Australia. The research is part of Eunice Chen's Doctor of Business Administration programme supervised by Dr. Herman Tse from the Department of Employment Relations and Human Resources, Griffith Business School, Griffith University, Brisbane, QLD Australia.

The purpose of the research is to explore the implications of vertical and shared leadership for team effectiveness in mobile retail shops in Hong Kong.

With the approval from your company's Director of Retail Sales, all front-line employees and managers in the retail shops are being invited to participate in this research but whether you want to participate is entirely your choice. Whatever decision you make will not disadvantage you. If you do decide to participate, you still can withdraw from the project at any time prior to submitting your completed survey without giving a reason. The anonymity of your responses is guaranteed because you are not required to provide your name nor any other information that can be used to identify you.

If you agree to participate, you will be asked to fill in the following questionnaire. The estimated time to complete the questionnaire is approximately 15- 20 minutes. You have to select which shop your replies are referred to by selecting the 'shop code' list in the pull down manual. All the shop codes will be replaced by numerical numbers and will not be identifiable after the data collection.

The collected data will be used in a thesis to be submitted for Ms Eunice Chen's Doctor of Business Administration degree. A summary of the results will be sent to your organization when the research has been completed. Participants can request for this summary via their company. However, individual participants and shops will not be identified in any reports arising from the project. All the collected data will be stored in a safe place with password protected for a period of five years. Only the researchers have the password.

If you would like further information, please contact Ms Eunice Chen at eunice.sy.chen@gmail.com or Dr. Herman Tse at h.tse@griffith.edu.au.

Complaints about this research

This project has been approved by the University's Human Research Ethics Committee, Approval No. H-2011-0163.

Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone (02) 49216333, email Human-Ethics@newcastle.edu.au, or the local independent contact, the Local DBA Secretariat, The Hong Kong Management Association, 16/F Tower B, Southmark, 11 Yip Hing Street, Wong Chuk Hang, Hong Kong, telephone (852) 27663303, email unc.dba@hkma.org.hk

Appendix 2: Participant Information Statement (Chinese)

研究項目：探索指派的領導和同事互助的領導對團隊效能的影響

研究項目的資料聲明：

你被邀請參加這調查，是甄穗怡小姐 (Ms Eunice Chen) 的工商管理博士學位的研究項目，她目前在澳洲紐卡斯爾大學(University of Newcastle)法律及工商管理學院就讀，指導導師是 Dr. Herman Tse，他任教於澳洲布里斯班格里菲斯大學(Griffith University) 格里菲斯商學院(Griffith Business School)僱傭關係和人力資源部門。

這研究項目的目的是探索指派的領導和同事互助的領導對團隊效能的影響，主要對象是香港流動通訊的零售店鋪。

在得到你們零售總監的批准，所有在商店的前線員工和管理人員都會被邀請參加這次研究，但是否參與完全是你個人的選擇，無論決定是怎樣都不會影響你。在你參加之後，你仍然可以在中途退出而不需理由。在這次調查中，你的身份是完全保密的，因為你不需要提供姓名，也沒有任何其他信息可用於識別你的身份。

如果你同意參加，請你填寫以下問卷，估計需時 15- 20 分鐘。開始時，你須要從名單中選擇你的“店鋪編號” ，在數據收集之後，所有商店編號將以數字取代，別人將無法識別。

所收集的數據將被用於甄穗怡小姐的博士論文中，當完成分析後，總結報告亦會發送一份到你的公司，你可通過公司索取副本，個別名字和店鋪是不會在報告中出現的。所收集的數據會被加密及保存在一個安全的地方五年，只有研究人員才有密碼。

如果你對這問卷有任何疑問，請聯絡甄穗怡小姐(eunice.sy.chen@gmail.com)或 Dr. Herman Tse (h.tse@ griffith.edu.au)。

多謝！

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如要投訴這調查

這研究項目已被大學的「人類研究及倫理委員會」批准，批號是 H-2011-0163。作為本研究的參與者，如果你對自己的權利有任何顧慮，或要投訴，你可通知研究者，或者，如你希望接觸一個獨立的人，可與人類研究倫理學主任聯絡：

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或本地獨立工商管理博士學位秘書處聯絡:

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Appendix 3: Questionnaire for Frontline Salesperson

Questionnaire for Frontline Salesperson

Please select the shop code that you work for: _____

Section 1: Vertical leadership behaviors

The following questions reflect the leadership behaviors of your shop manager. Please select the most appropriate number that appeal to you in each question.

Question		definitely not true	not true	neither true nor untrue	true	definitely true
1	My shop manager establishes my performance goals.	1	2	3	4	5
2	When it comes to my work, my shop manager gives me instructions on how to carry it out.	1	2	3	4	5
3	My shop manager lets me know about it when I perform poorly.	1	2	3	4	5
4	My shop manager gives me positive feedback when I perform well.	1	2	3	4	5
5	My shop manager will recommend that I am compensated more if I perform well.	1	2	3	4	5
6	My shop manager expects me to perform at my highest level.	1	2	3	4	5
7	My shop manager isn't afraid to "break the mold" to find different ways of doing things.	1	2	3	4	5
8	My shop manager provides a clear vision of where our team is going.	1	2	3	4	5
9	My shop manager shows enthusiasm for my efforts.	1	2	3	4	5
10	My shop manager encourages me to treat myself to something I enjoy when I do a task especially well.	1	2	3	4	5
11	My shop manager encourages me to work together with other individuals who are part of the team.	1	2	3	4	5
12	My shop manager and I work together to decide what my performance goals should be.	1	2	3	4	5
13	My shop manager advises me to look for the opportunities contained in the problems I face.	1	2	3	4	5

Section 2: Shared leadership behaviors

The following questions reflect the leadership behaviors shared among the frontline employees as a whole in your shop. Please select the most appropriate number that appeal to you in each question.

Question		definitely not true	not true	neither true nor untrue	true	definitely true
1	My team members establish my performance goals.	1	2	3	4	5
2	When it comes to my work, my team members give me instructions on how to carry it out.	1	2	3	4	5
3	My team members let me know about it when I perform poorly.	1	2	3	4	5
4	My team members give me positive feedback when I perform well.	1	2	3	4	5
5	My team members will recommend that I am compensated more if I perform well.	1	2	3	4	5
6	My team members expect me to perform at my highest level.	1	2	3	4	5
7	My team members aren't afraid to "break the mold" to find different ways of doing things.	1	2	3	4	5
8	My team members provide a clear vision of where our team is going.	1	2	3	4	5
9	My team members show enthusiasm for my efforts.	1	2	3	4	5
10	My team members encourage me to treat myself to something I enjoy when I do a task especially well.	1	2	3	4	5
11	My team members encourage me to work together with other individuals who are part of the team.	1	2	3	4	5
12	My team members and I work together to decide what my performance goals should be.	1	2	3	4	5
13	My team members advise me to look for the opportunities contained in the problems I face.	1	2	3	4	5

Section 3: Team Effectiveness

The following questions reflect the team performance of your shop. Please select the most appropriate number that appeal to you in each question.

Question		definitely not true	not true	neither true nor untrue	true	definitely true
1	The team delivers its commitments.	1	2	3	4	5
2	The team delivers its commitments on time.	1	2	3	4	5
3	The team provides a volume of work consistent with established standards.	1	2	3	4	5
4	The team is highly effective at implementing solutions.	1	2	3	4	5
5	The team delivers important changes.	1	2	3	4	5
6	The quality of the team's output is very high.	1	2	3	4	5
7	The team performs duties accurately and consistently.	1	2	3	4	5
8	The team eliminates root problems, not just symptoms.	1	2	3	4	5
9	The team faces new problems effectively.	1	2	3	4	5
10	The team changes behavior to meet the demands of the situation.	1	2	3	4	5
11	The team copes with change very well.	1	2	3	4	5
12	The team sets goals and priorities for maximum efficiency.	1	2	3	4	5
13	The team develops workable plans.	1	2	3	4	5
14	The team works on important problems.	1	2	3	4	5
15	The team has its priorities straight.	1	2	3	4	5
16	The team communicates its progress.	1	2	3	4	5
17	The team proactively communicates its progress.	1	2	3	4	5
18	The team keeps everyone informed.	1	2	3	4	5
19	The team keeps everyone informed on its progress.	1	2	3	4	5
20	The team's contribution to the company is very valuable.	1	2	3	4	5
21	The team makes valuable contributions to	1	2	3	4	5

	the company.					
22	The contributions of this team are very valuable to the company.	1	2	3	4	5
23	The team is highly effective.	1	2	3	4	5
24	The team is making very good progress on the teams' charter.	1	2	3	4	5
25	The team does very good work.	1	2	3	4	5
26	The team does a very good job.	1	2	3	4	5

Thank you for your participation.

Appendix 4: Questionnaire for Frontline Salesperson (Chinese)

問卷：前線員工

請選擇你工作的店鋪編號：_____

第一節：店長的行為

在以下問題，請根據你店長的領導行為，選擇最適當的答案。

問題		絕對不是真的	不是真的	既不真也不假	真的	絕對真實
1	我的店長擬定我的表現目標。	1	2	3	4	5
2	我的店長給予我指示如何執行我的工作。	1	2	3	4	5
3	當我的表現不佳時，我的店長讓我知道。	1	2	3	4	5
4	當我表現好時，我的店長給我正面的回應。	1	2	3	4	5
5	如果我表現出色，我的店長會建議給我相應的報酬。	1	2	3	4	5
6	我的店長期望我能夠表現出我最好的一面。	1	2	3	4	5
7	我的店長不怕打破既有模式而會嘗試不同的方法去處理工作。	1	2	3	4	5
8	我的店長給我們團隊清晰的願景和方向。	1	2	3	4	5
9	我的店長對我所作的努力顯示熱忱。	1	2	3	4	5
10	當我完成了某些工作而且做得好的時候，我的店長鼓勵我做我喜歡的事情獎勵自己。	1	2	3	4	5
11	我的店長鼓勵我與其它組員一起合作。	1	2	3	4	5
12	我和我的店長一起決定我工作的目標。	1	2	3	4	5
13	我的店長會提議我在解決問題時發掘機會。	1	2	3	4	5

第二節：同事互助的領導行為

在以下問題，請根據前線銷售同事的領導行為作為一個整體，選擇最適當的答案。

問題		絕對不是真的	不是真的	既不真也不假	真的	絕對真實
1	我的同事擬定我的表現目標。	1	2	3	4	5
2	我的同事給予我指示如何執行我的工作。	1	2	3	4	5
3	當我的表現不佳時，我的同事讓我知道。	1	2	3	4	5
4	當我表現好時，我的同事給我正面的回應。	1	2	3	4	5
5	如果我表現出色，我的同事會建議給我相應的報酬。	1	2	3	4	5
6	我的同事期望我能夠表現出我最好的一面。	1	2	3	4	5
7	我的同事不怕打破既有模式而會嘗試不同的方法去處理工作。	1	2	3	4	5
8	我的同事給我們團隊清晰的願景和方向。	1	2	3	4	5
9	我的同事對我所作的努力顯示熱忱。	1	2	3	4	5
10	當我完成了某些工作而且做得好的時候，我的同事鼓勵我做我喜歡的事情獎勵自己。	1	2	3	4	5
11	我的同事鼓勵我與其它組員一起合作。	1	2	3	4	5
12	我和我的同事一起決定我工作的目標。	1	2	3	4	5
13	我的同事會提議我在解決問題時發掘機會。	1	2	3	4	5

第三節：團隊績效

請就你店鋪的表現，選出最適合的答案。

問題		絕對不是真的	不是真的	既不真也不假	真的	絕對真實
1	這鋪能履行其承諾。	1	2	3	4	5
2	這鋪能在既定時間內履行承諾。	1	2	3	4	5
3	這鋪能連續地履行既定標準的工作。	1	2	3	4	5
4	這鋪能高效地執行解決方案。	1	2	3	4	5
5	這鋪能履行重要的改變。	1	2	3	4	5
6	這鋪的工作品質是很高的。	1	2	3	4	5
7	這鋪能準確、一致地履行職責。	1	2	3	4	5
8	這鋪能解決問題的根本，而不單是表面徵狀。	1	2	3	4	5
9	這鋪能有效地面對新的問題。	1	2	3	4	5
10	這鋪能改變其行為，以滿足不同情況的需求。	1	2	3	4	5
11	這鋪能有效地應付轉變。	1	2	3	4	5
12	這鋪為達到最高的效率而設定目標和優先次序。	1	2	3	4	5
13	這鋪制定可行的計畫。	1	2	3	4	5
14	這鋪處理重要的問題。	1	2	3	4	5
15	這鋪有其處事的優先次序。	1	2	3	4	5
16	這鋪通知其工作進展。	1	2	3	4	5
17	這鋪主動地通知其工作進展。	1	2	3	4	5
18	這鋪會與每個人保持聯絡。	1	2	3	4	5
19	這鋪使每個人都知道其工作進展。	1	2	3	4	5

20	這鋪的貢獻對公司很有價值。	1	2	3	4	5
21	這鋪對公司作出有價值的貢獻。	1	2	3	4	5
22	公司對這鋪的貢獻有很高的評價。	1	2	3	4	5
23	這鋪很有效地運作。	1	2	3	4	5
24	這鋪在鋪的營運上有良好的進展。	1	2	3	4	5
25	這鋪做了很好的工作。	1	2	3	4	5
26	這鋪做得很好。	1	2	3	4	5

多謝您的的參與！

～～～完～～～

Appendix 5: Questionnaire for Shop Manager

Questionnaire for Shop Manager

Please select the shop code that you work for: _____

Team Effectiveness

The following questions reflect the team performance of your shop. Please select the most appropriate number that appeal to you in each question.

Question		definitely not true	not true	neither true nor untrue	true	definitely true
1	The team delivers its commitments.	1	2	3	4	5
2	The team delivers its commitments on time.	1	2	3	4	5
3	The team provides a volume of work consistent with established standards.	1	2	3	4	5
4	The team is highly effective at implementing solutions.	1	2	3	4	5
5	The team delivers important changes.	1	2	3	4	5
6	The quality of the team's output is very high.	1	2	3	4	5
7	The team performs duties accurately and consistently.	1	2	3	4	5
8	The team eliminates root problems, not just symptoms.	1	2	3	4	5
9	The team faces new problems effectively.	1	2	3	4	5
10	The team changes behavior to meet the demands of the situation.	1	2	3	4	5
11	The team copes with change very well.	1	2	3	4	5
12	The team sets goals and priorities for maximum efficiency.	1	2	3	4	5
13	The team develops workable plans.	1	2	3	4	5
14	The team works on important problems.	1	2	3	4	5
15	The team has its priorities straight.	1	2	3	4	5
16	The team communicates its progress.	1	2	3	4	5
17	The team proactively communicates its progress.	1	2	3	4	5
18	The team keeps everyone informed.	1	2	3	4	5
19	The team keeps everyone informed on its	1	2	3	4	5

	progress.					
20	The team's contribution to the company is very valuable.	1	2	3	4	5
21	The team makes valuable contributions to the company.	1	2	3	4	5
22	The contributions of this team are very valuable to the company.	1	2	3	4	5
23	The team is highly effective.	1	2	3	4	5
24	The team is making very good progress on the teams' charter.	1	2	3	4	5
25	The team does very good work.	1	2	3	4	5
26	The team does a very good job.	1	2	3	4	5

Thank you for your participation.

~~~ The End ~~~
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Appendix 6: Questionnaire for Shop Manager (Chinese)

問卷：店鋪經理

請選擇你工作的店鋪編號：_____

團隊績效

請就你店鋪的表現，選出最適合的答案。

問題		絕對不是真的	不是真的	既不真也不假	真的	絕對真實
1	這鋪能履行其承諾。	1	2	3	4	5
2	這鋪能在既定時間內履行承諾。	1	2	3	4	5
3	這鋪能連續地履行既定標準的工作。	1	2	3	4	5
4	這鋪能高效地執行解決方案。	1	2	3	4	5
5	這鋪能履行重要的改變。	1	2	3	4	5
6	這鋪的工作品質是很高的。	1	2	3	4	5
7	這鋪能準確、一致地履行職責。	1	2	3	4	5
8	這鋪能解決問題的根本，而不單是表面徵狀。	1	2	3	4	5
9	這鋪能有效地面對新的問題。	1	2	3	4	5
10	這鋪能改變其行為，以滿足不同情況的需求。	1	2	3	4	5
11	這鋪能有效地應付轉變。	1	2	3	4	5
12	這鋪為達到最高的效率而設定目標和優先次序。	1	2	3	4	5
13	這鋪制定可行的計畫。	1	2	3	4	5
14	這鋪處理重要的問題。	1	2	3	4	5
15	這鋪有其處事的優先次序。	1	2	3	4	5
16	這鋪通知其工作進展。	1	2	3	4	5

17	這鋪主動地通知其工作進展。	1	2	3	4	5
18	這鋪與每個人保持聯絡。	1	2	3	4	5
19	這鋪使每個人都知道其工作進展。	1	2	3	4	5
20	這鋪的貢獻對公司很有價值。	1	2	3	4	5
21	這鋪對公司作出有價值的貢獻。	1	2	3	4	5
22	公司對這鋪的貢獻有很高的評價。	1	2	3	4	5
23	這鋪很有效地運作。	1	2	3	4	5
24	這鋪在鋪的營運上有良好的進展。	1	2	3	4	5
25	這鋪做了很好的工作。	1	2	3	4	5
26	這鋪做得很好。	1	2	3	4	5

多謝您的的參與！

～～～完～～～