

**THE FACTORS AFFECTING THE LEADERSHIP  
PERFORMANCE OF FEMALE MANAGERS IN CHINA'S  
TAIWANESE FIRMS -THE CASE OF HUAI'AN , JIANGSU**



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## ABSTRACT

<b>Title of Thesis</b>	THE FACTORS AFFECTING THE LEADERSHIP PERFORMANCE OF FEMALE MANAGERS IN CHINA'S TAIWANESE FIRMS -THE CASE OF HUAI'AN , JIANGSU
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With the continuous development and progress in society and economy, the economic and cultural exchanges between Taiwan and mainland China have been continuously enhanced. Mainland Taiwan-funded enterprises have sprung and spread all over mainland China. Female executives in Taiwan-funded enterprises have gradually entered the public view. More women have taken managerial positions. However, how good is the leadership of female executives in mainland Taiwan-funded companies and what are the factors that influence the exertion of the leadership female supervisors ? This study attempted to identify the subjective and objective factors that hinder the leadership of female supervisors in Taiwan-funded enterprises, to ensure the normal development of female supervisor leadership, and to put forward suggestions accordingly.

After literature review was done and analysis was completed , the factors affecting the leadership of female supervisors were summarized. Taiwan-funded enterprises are neither foreign-funded enterprises, nor rooted in the mainland, however, they hold traditional concepts as enterprises do in China. They also have the characteristics of market economy management as foreign-funded enterprises. With regard to the leadership of female supervisors in Taiwan-funded enterprises,the influencing factors are collated and summarized into three categories: personal factors, organizational factors, and cultural factors. The research offers a discussion on how to ensure the normal exertion of leadership of female supervisors in Taiwan-funded enterprises. A proposal was made in order to promote the development of Taiwan-funded enterprises, to provide better growth opportunity and platform female executives, improve the core competitiveness of Taiwan-funded enterprises, and promote healthy and orderly

development of Taiwan-funded enterprises in mainland China.

A questionnaire was used to conduct an empirical study on conceptual models. A total of 700 Taiwan-funded enterprises in the High-tech Development Zone of Huai'an City, Jiangsu Province, China, was selected as respondents. A total of 650 questionnaires was recovered, and SPSS 20 and AMOS 23 were used for statistical analysis. Data reliability and validity, variance and other analysis methods used and second-order factor analysis and hypotheses testing were done. The following findings were drawn:

The leadership of female supervisors in Taiwan-funded enterprises in mainland China is affected by personal factors. Among them are gender, age, length of work participation, education level, and business type. These factors have a significant impact on their leadership. Organizational factors such as internal relationships, person-organizational fit, procedural rules, and organizational growth opportunity have a significant positive impact on the leadership of female Taiwanese enterprises in mainland China. The influence of cultural factors is also insignificant.

Therefore, enterprises must pay attention to whether the system of the corporate organization is sound and whether the cultural atmosphere is grounded. When selecting people for employment, personal factors should be included in the scope of consideration. For female supervisors with long working years and high academic qualifications, the use of management positions should be strengthened. Women also need to make full use of their own dominant personal conditions when they are in charge.

The conclusion arrived at this research provides a theoretical basis for other similar companies in the use and management of female supervisors and has certain reference and reference significance.

Key words: Taiwan-funded enterprises in Mainland China; Female supervisor Leadership; Female manager; Taiwanese firm, Second order factor analysis

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Background of the study**

According to the latest survey results of the International Business Survey Report of Grant Thornton International in 2015, the proportion of female executives in enterprises in mainland China is 25%, and women have advantage in management support positions such as financial management and human resources management (HR), and so on. Around 30% of human resources directors and 23% of chief financial officers are women. Women in various age groups are involved in various functions in companies. Among them are service positions such as HR and legal administrators which account for the majority, and the proportion of technical positions is relatively small. In sales positions, the proportion of male and female supervisors is equal. It is foreseeable that with the continuous development and progress of Chinese social economy, women have demonstrated their femininity in different managerial positions, and made significant contributions to the company. It can be predicted that in the next 5-10 years, companies will need a large number of women in management positions. Thus, whether there are sufficient and fully competent female supervisors may, to a certain extent, become one of the key factors that affect the healthy development of company. There is very little research done on the topic.

With the resumption of economic and trade relations on both sides of the Taiwan Strait, Taiwan-funded enterprises have rapidly established their operations in the southeast coastal areas of the mainland and are now. Becoming an important participant in the mainland's booming economy. According to the General Administration of Customs of China, the total value of import and export between major regions Jiangsu Province from January to May 2017 show that the import from

Taiwan reached 75.65 billion yuan, accounting for 12.7%; and the export to Taiwan was 27.52 billion yuan, accounted for 3%. Huai'an City, Jiangsu Province is a region where Taiwan-funded enterprises invested after Kunshan. In 2006, Taiwan Foxconn Group established the first Taiwan-funded enterprise in Huai'an City. As of 2017, a total of 1200 Taiwan-funded projects with a total investment of more than US \$12 billion have been approved in Huai'an. In 2014, Huai'an established the first and only Taiwanese business school in the country. It is a cross-strait youth employment and entrepreneurship demonstration site recommended by the Taiwan Affairs Office. Today, the Taiwanese Business School in Huai'an has become a bright spot for servicing Taiwanese companies in Huai'an. It bridges economic, trade, cultural and education cooperation between Huai'an and Taiwan, and it is also an open platform for personnel training between Huai'an and Taiwanese universities.

According to a telephone interview with the Taiwan Affairs Office of Huai'an City in March 2017, Taiwan-funded enterprises in Huai'an had more than 190,000 employees in the mainland, about 63.1% of female employees, and about 6,000 female employees are in leadership positions.

As an important participant in the development of the whole society, women are increasingly involved in socio-economic and cultural activities. Women accounted for 40 per cent of the world's labor force, according to the Change of Pattern in the Labor World (2006). The global female labor force rose from less than 1 billion in 1991 to 1.22 billion in 2005, mainly from the emergence of developing countries.

There were 2,142 results in the literature retrieved from China Knowledge Network on the theme of female supervisors, a total of 686 results based on the keywords "female supervisor" and 1,681 results in the literature on the theme of "women's leadership" with 48 results in the keywords. The literature on the topic of Taiwan-funded enterprises, has a total of 4,027 results, and 1,57 results for the keywords. The academic attention to Taiwan-funded enterprises + women + leadership is shown in Figure 1.1:



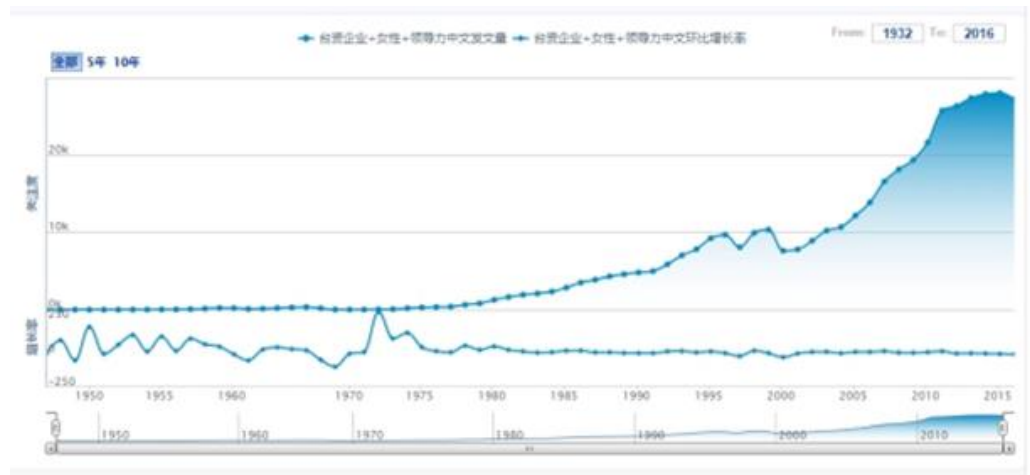


Figure 1.1 Academic concerns

**Source:** CNKI (China Knowledge Network), "Taiwan-funded enterprises + women + leadership" academic attention, 2017

This figure shows that Chinese women play an increasingly important role in the business community. Moreover, the attention on the leadership of women in Taiwan-funded enterprises in mainland China is on the rise.

Since a large number of women are expected to join the managing team in the future, understanding the characteristics of women's leadership and its impact on the development of enterprises has become a topic that cannot be ignored. There are factors affecting women's leadership, and there are many factors that affect women's ability to hold leading positions. It is necessary to carry out a study on the leadership and influencing factors of female supervisors in Taiwan-funded enterprises.

## 1.2 Research objective

In this study, the female supervisors in Taiwan-funded enterprises in Huai'an were studied. The aim of the study was to understand the influencing factors on female supervisors' leadership in Taiwan-funded enterprises, and to identify the subjective and objective factors that hinder the leadership of female supervisors. The study also aimed explore the system framework suitable for the management ability of female supervisors in Taiwan-funded enterprises in mainland China. And to make

suggestions on ensuring the normal development of female supervisors' management ability. Thus, to promote the development of Taiwan-funded enterprises, to let female executives have better growth opportunity and platforms, improve the core competitiveness and the healthy and orderly development of Taiwan-funded enterprises in mainland China.

### **1.3 Research questions**

This study focused on four questions and investigations and studies in conjunction with actual situations were conducted to make the conclusions drawn from the result. The questions are as follows:

What is the impact of personal factors on the leadership of female supervisors in Taiwan-funded enterprises in mainland China? Are there organizational factors that have an impact on the leadership of female supervisors? What is the size of these influence? Is the influence of cultural factors important or underestimated in the leadership of female supervisors of Taiwan-funded enterprises in mainland China in that particular cultural context?

### **1.4 Scope of the study**

The study was set in Taiwan-funded enterprises in Huai'an City, Jiangsu Province, China. Taiwan-funded enterprises in mainland China refer to the enterprises whose entire capital established within the territory of China are funded by Taiwanese investors in accordance with the laws of mainland China. Since the beginning of 1980, many Taiwan-funded enterprises have come to the mainland to carry out trade activities through Hong Kong and other places. In 1987, the Taiwan authorities officially allowed Taiwanese nationals to visit their relatives in mainland of China. That move further relaxed the restrictions on economic and trade activities on both sides of the Taiwan Strait. Economic and trade exchanges became more active. In 1991, the Taiwanese authorities officially allowed limited investments in the

mainland. The Chinese government also promulgated regulations to encouraging investment of Taiwan compatriots, and the legitimacy of both sides was determined. Cheap labor, rich natural resources and various preferential policies supported by the Chinese government have made Taiwan-funded enterprises thrive in the mainland.

### **1.5 Significance of the study**

Xu jianxin ( 2009) stated that there are the different social and political systems, and cultural environments across the Taiwan Strait. Because of this, there are two distinct sub-cultures that others China. The differing corporate culture of Taiwan-funded enterprises in mainland China involves management mode. The management mode of Taiwan-funded enterprises in mainland China is different from that of other national, transnational and cross-border cultural enterprises. It was found that the management concept and mode of Taiwan-funded enterprises have been based on the management style of Japanese enterprises. In most Taiwan-funded enterprises in mainland China, the hierarchy is more obvious, and the authority of upper managers cannot be underestimated. This kind of strict management system is more likely to be a set-up for Chinese operations. When two different corporate cultures collide, the key to the development of the enterprises is whether they can be skillfully integrated.

Carnes, Houghton and Ellison (2015) emphasize that one of the important success factors for an organization is the ability to identify and select effective leaders. With the continuous development and progress in society, female managers can be seen everywhere, and their value as well as dedication to enterprises is increasingly increased. Therefore, enterprises should also focus on the group of female directors and pay attention to their overall development and keep them actress with future trends. As for the term leadership, female managers are far different from male managers. In the workplace, women are affected by pressure from different aspects and factors from various perspectives. These may affect their career development, or even may lead to stagnation. A large amount of research shows that women have to hold dual roles because of two different responsibilities in the work place and at home. The choice between job and family is a common factor influencing female managers in mainland China in their career development. In addition, there are also

constraints imposed by traditional culture, such as "Women follow men's decisions". Therefore, it is of great significance to explore the influencing factors of the leadership of female executives in enterprises from different dimensions, and to help female managers in Taiwan-funded enterprises to balance these factors so that they can better serve enterprises and make greater contributions to society.

By combing and integrating the status quo, studying development trends and conducting research on the foundations of research on female leadership in enterprises, this paper provides relevant theoretical support for a research on female leadership in Taiwan-funded enterprises in mainland China. Consequently, the research done on this topic can clarify issues in the current social environment, and find out the influence factors on female managers, leadership sum up new countermeasure and provide guidance and help female executives in Taiwan-funded enterprises to create greater value for enterprises.

## CHAPTER 2

### LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

This chapter describes relevant concepts as well as the importance and constituent elements of leadership. It studies and discusses the influencing factors of leadership, compares management styles of both genders, and differences between men and women at work. At the same time, based on the literature, a model on the influencing factors of female leadership in Taiwan-funded enterprises in mainland China was constructed and corresponding hypotheses were made.

#### 2.1 Leadership

As far as the concept of leadership is concerned, it remains an open question, and scholars have explained it from different perspectives. In the 2015 book titled "*Leadership: Developing your potential*" by John C. Maxwell, an American leadership expert, he argued that leadership, or influence, is the ability to subtly influence and affect employees. Leadership not only represents the ability of managers, but also includes the ability of being managed, which is also one of the core competitiveness of managers and enterprises. In the book "*The Leadership Experience*," Richard L. Daft (2014) wrote that leadership includes not only the skills to organize, plan, or control others, but also something more profound and subtle. "Living, working and leading based on our abilities means using all of our personal characteristics, including intellectual, emotional and spiritual abilities and understanding." In "*The Four Roles of Leadership*," by Dr. Stephen R.C, leadership

includes path finding, aligning, empowering and modeling aimed to build mutual trust. Peter F. Drucker, in his book *"Foundation for Nonprofit Management"* describes leadership as the ability to grasp an organization's mission and to mobilize people around it. According to Drucker, the basic principle of leadership is: leadership is the art of being a person, not how to do something, and ultimately it is the quality and personality that decide if one is to be a leader. Leaders succeed through the efforts of the subordinates they lead. The basic task of a leader is to build a highly motivated and productive team. Leaders build bridges of communication.

In the *"Five Forces Model of Leadership"* proposed by the research group of Science and Technology Leadership of Chinese Sciences Academy in 2006, it was concluded that the power of leadership is mainly reflected in the "level" of leadership. The power of leadership is a conceptual chain involving leading, leading process, leading behavior, leadership skills and leading knowledge. Leadership is composed of five forces or leadership abilities such as the foresight that determines the group's vision, the charisma and influence to attract members, the decision-making ability to regulate the development direction of the organization, and the control ability. Leadership is an organizational force that can lead the team to move forward. Through the leader's role of motivating employees, they can achieve their common goals or individuals. The power of leadership is the ability and influence of leaders in an organization to lead members to achieve their goals (Zhang Xiaojuan, 2005). Female leadership refers to the ability of female executives to take part in management and lead employees to explore their potentials and create greater value for their enterprise unconsciously through the use of power and the charisma of their leaders (Dong Fangfang, 2007).

Through the analysis of various aspects of leadership by Chinese and western scholars, a clear meaning of leadership is revealed. First, leadership is a complex and multiple behaviors concept. Leadership requires an effective combination of internal



factors. Second, leadership is a special kind of influence. "Leadership is an influential relationship between leaders and followers when they try to change and expect the results of their shared goals." "Leadership is an influence that allows people to go beyond their normal standards, normal quality, and be willing to do that." Leadership can have three aspects: bilateral nature, target nature and nature of dynamic persistence.

(1) Bilateral Nature: When leadership is mentioned, it is a custom to think that the leader exerts influence on the followers. However, even if a leader exerts or uses his or her charisma, the influence of a leader is ineffective if the follower does not accept it. Therefore, for the leadership to be effective, it is not single-sided and is not a passively accepted influence from the leader, but through the interaction of both parties. It's a mutual process.

(2) Target Nature: There is a final objective after the interaction between leaders and followers, and it is the mutual goal of both parties. With the goal, leaders and followers can then actively and productively influence each other to achieve a future vision.

(3) Nature of Persistent Dynamism: Leadership itself is a process. In the process, the influence does not work at a certain point, but throughout the whole process of leadership activities.

### **2.1.1 The importance of leadership**

The discussion of leadership characteristics is a relatively early concept in the leadership studies. It focuses on the inner qualities and personality characteristics of effective leadership and tries to explore what factors make a leader successful. The theory is based on the idea that some people have innate qualities that make them leaders. The above foundation also becomes the limitation of early leadership theory,

which regards leadership as an innate ability or quality that limits the possibility of leadership cultivation and improvement.

In 1985, Bass and Burns explained "transformational leadership" based on their research. They argued that transformational leadership allows employees to realize the task, the importance of establishing the atmosphere of mutual trust to motivate subordinates to satisfy high-level needs, make subordinates fully explore their potential, and sacrifice their own interests for the greater good of the team and the benefit of the organization. While explaining the definition of transformational leadership, Bass proposed four elements of transformational leadership, namely, charismatic leadership, intellectual stimulation, personalized care, and vision motivation.

Geller (2003) believes that the leadership of managers can indirectly affect the work behavior of employees or the whole organization. *The five models of leadership* in the Chinese sciences academy concluded that leadership is one of the core competitive advantages of all human organization. In the current rapid information development era, leaders need to correctly grasp the development direction, develop optimal strategies and decision-making skills, attract and affect organizational members in order to efficiently achieve established goals and strategies. Therefore, the leadership of a manager determines the fate and development prospect of an organization.

In Warren and Names' "*Leadership*" (2008), the authors put forward the transformational leadership theory, arguing that leadership exists in a team and is constantly improved. They went to say that managers should create an organizational vision through the leadership power. Transformational leaders focus on intangible qualities such as vision, shared values, and ideas, not evaluating and controlling specific communications with followers by using rules, guidance, and intuition. They

provide a perspective leadership. Later in this paper the writes provided theoretical reference for the components of leadership later in this paper.

### **2.1.2 Component elements of leadership**

According to Dong Fangfang (2003), the composition of the leadership studies does not form a unified model, and many factors are repeated. Many research studies do not put gender into account. the constitute factors of leadership is thus applicable to male and for female managers. This also provides a powerful reference for this study.

Based on the previous data, this study divided the components of female leadership of Taiwan-funded enterprises in mainland China into six aspects: communication ability, management innovation ability, command response ability, personnel integration ability, emotion management ability and charm. In which:

#### **Communication:**

Through good and effective communication, managers can improve their affection with subordinates. Communication is also the main factor influencing the success of an enterprise project (Zulch , 2014). Internal communication in an enterprise is not trivial for management. Effective internal communication can improve the profitability of an enterprise, and it is also a powerful motivation for employees to improve their work efficiency (Mohelska & Sokolova, 2015).

Heigesen (1990) proposed the theory of female management style, and pointed out that female managers pay special attention to effective communication with subordinates in the management process, which can create a working atmosphere of unity, fraternity, and efficient cooperation for the organization. Female supervisors are better at communicating and cooperating with each other in their management style. Female supervisors strive to be when making decisions (Tu Lixia, 2004). In terms of social contact, women have better intuition and communication skills than

men, so they can display their unique affinity, which is also where the leadership charisma of female supervisors lies (Dong Fangfang, 2007). Compared with male supervisors, the main advantages of women lie in communication and coordination, language expression, and many of these. They are good at and attach importance to the use of non-power influence, and adopt flexible management methods such as motivation, communication, coordination and guidance, language expression and other aspects, which is also conducive to the development and implementation of work (Qian Yaling, 2009). One of the most important skills of a manager in an enterprise is communication (Heldman, 2011). Studies have shown that internal communication is essential to management and especially critical to employee engagement. Effective internal communication can improve the profitability of an enterprise and is a powerful motivation for work (Mohelska & Sokolova, 2015).

The survival of any organized human activity depends largely on the ability to communicate with others. Team managers need to establish cooperative relationships with team members to ensure a good communication atmosphere and to ensure that members can accept their leadership style. Effective communication skills can be divided into three types: cognitive, technical and communication on social skills. Among them, cognitive skill involves professional knowledge base. Technical skills are the professional practical and manipulation techniques required by the profession (Hargie, 2007), especially in the planning and implementation stage of a project (Odusami, 2002); Communication or social skills require the ability of individuals to interact effectively with customers and other professionals (Hargie, 2007). Heldman (2011) pointed out that "the most important skill that project managers have is communication skills". Effective leadership remains largely a matter of communication. Managers use effective and good communication skills to motivate, nurture and encourage others to follow their management. Without effective communication, managers are not effective leaders. According to the results of early

research on how managers succeed and are promoted in the organization in a Harvard Business School study, individuals who make progress in the business field are those who can communicate, make reasonable decisions, and use the right people who can get things done (Bowman et. al,2006). Communication is a powerful force affecting the success of enterprise projects. Managers need to develop a management style that can effectively and efficiently communicate with stakeholders (Zulch, 2014). Barrett (2006) explains leadership communication as follows: first, core communication. All effective communication depends on the core skills of the spiral center, and many of them are personal skills. This is a core skill that any organization leader must master. The second is management communication which is based on core competence, which is more directly involved in the management of others. This is the skill required to communicate with individuals and manage teams. Finally, there is enterprise communication, which involves the extension of management skills to the ability to lead an organization and address the needs of a wider community. Communication becomes more complex when managers need to consider the best way to communicate with all internal and external stakeholders.

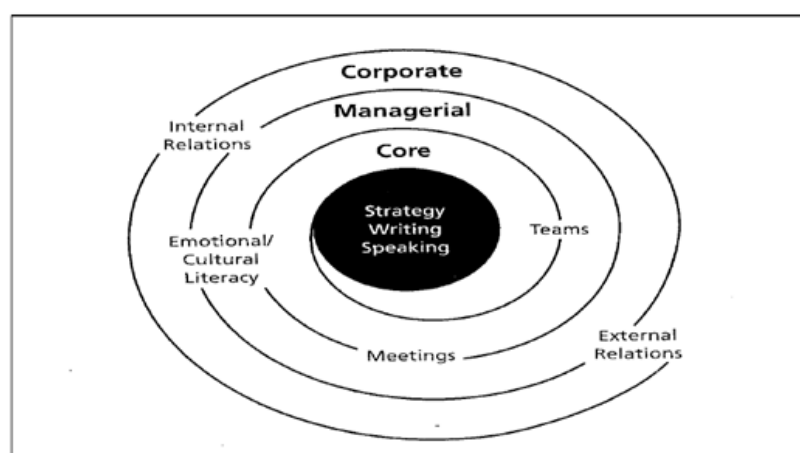


Figure 2.1 Leadership communication framework chart

(Source: Barrett, D.J. (2006a), *Leadership communication*, McGraw Hill Education, Boston.)



### **Management Innovation:**

Entrepreneurs must have good decision-making ability, the ability to grasp opportunities, and the ability to collect and obtain information. Managers need to have the ability of innovation, managing works and personnel (Spencer & McClelland, 1994, Evers & Rush, 1996). For enterprise executives, innovation ability, strategic management, and decision-making ability are all they should possess as a leader (Wang Xiaojun, 1999). In the context of the new economic era, female managers should also have the ability to carry out organizational change, promote long-term planning, and dare to innovate, to better use their strengths and work effectively (Tu Lixia, 2003). In the book *"How to be a good leader"*, the author concludes that top business leaders need to possess skills that include "development through innovation" (Hulme, 2006). A qualified supervisor is someone who is not comfortable with the status quo, has creative thinking and is good at developing new things. On Hulme's study many of the interviewees said that continuous learning and continuous innovation are necessary if to further develop or go to a higher level in the enterprise. Furthermore, only by infusing emerging and fresh ideas into the work, can enterprises and individuals achieve better long-term development. Research data shows that innovation is included in the component of leadership, and innovation is identified as the most important component of leadership. To be successful, a manager must have a variety of leadership models, including strategic decision making, interpersonal communication, and creativity. The leadership of female directors includes the ability to see problems from a long-term perspective, pay attention to innovation, and grasp direction and change in a timely manner. Supervisors can only meet their career development needs by constantly learning new knowledge and ideas. The success of an enterprise often depends on its innovation ability. Both management innovation and product innovation are common goals of many organizations and necessary for survival and long-term development, flexible



management style can promote both innovation and organizational learning (Dunne et. al, 2016). Correctly managing innovation is one of the core challenges for economic development (Kusterer & Schmitz, 2017).

#### **Command responsiveness or strain:**

Hulme (2006) argued that as a leader, you should have the ability to make decisions accurately and quickly while encountering emergencies. Leaders should have the ability to quickly find a way out of a difficult situation under special circumstances. For leadership of female cadres, in addition to command ability, they also need to have the ability to be flexible, to have work commanding ability and cooperate with men (Dong Fangfang, 2007; Cheng Yalin, 2009). When an enterprise is in a disadvantageous position, such as encountering crisis and conflict, the management's ability of command and response becomes particularly important. The leadership of female supervisors also needs to be flexible so that they can flexibly command and manage the team when facing emergencies at work. Women supervisors can effectively accomplish organizational goals only if they are capable of assisting, directing, and responding flexibly.

#### **Personnel Integration:**

Taking communications industry as an example, a study on senior executives found that they should have team leadership, benchmarking ability, and ability to recognize and distinguish people (Shi Kan, 2002). Leadership in an enterprise should include personal communication ability, self-confident and persistent quality, ability to update knowledge, etude charisma, and so on. (Chen Wansi, 2006). According to a survey, the main skills a leader needs to have include capability of retention. The report notes that leaders who can retain talent are generally more likely to get good job results because they spend less time filling vacant positions and hiring new

employees (Hulme, 2006). Leaders need to have the ability to correctly understand the different ideas and behaviors of employees and discover the common points and differences of views in a timely manner, so as to promote consensus among employees. Previous studies also concluded that female supervisors are more capable of cognitive integration than men. This is also the advantage and necessary leadership of female supervisors in the new economic era. According to Dong Fangfang (2007), for women to better lead subordinates, good cognitive ability and integration ability are essential. With the continuous competition of excellent talents, female managers should not be neglected in the selection of talents. Most of the interviewees in the study said that only by putting new generations and ideas into the company can they provide a cradle for the long-term development of enterprises and individuals. In the management process, both the manager and the subordinates interact and depend on each other. Only when the manager and the subordinates cooperate sincerely, rationally allocate the talented people and resources, and improve the utilization efficiency of resources, can effective leadership be realized. More importantly, female supervisors need to spend some time and energy to deal with their subordinates and fully mobilize their work enthusiasm, which is conducive to the improvement of female supervisors' leadership.

#### **Emotion Management:**

Managers should be able to actively and reasonably adjust and control their emotions. A mature female supervisor should have a strong emotional control ability, and should be open-minded. It is very beneficial to the growth of managers and subordinates, which is important for a female supervisor to effectively manage subordinates. According to the study, outgoing female managers are more likely to present agreeableness and influence on others. Women who have worked for 11 to 15 years have the strongest emotion management skills. Candidates for the higher

managerial role will be more inclined to have ability to promote team work and team building, interpersonal communication, flexible communication and mutual understanding with others, good for provide training, motivation and influence subordinates, inculcate good discipline, flexibility and innovative global ideas and strategic thinking, objective orientation, dare to take responsibility, stay calm, and reflect charisma (Dong Fangfang, 2007; Zhang Wan 2008; Zhang Fan, 2009; Wang Li, 2015). The emotion control ability of female supervisors is one of the major components of their leadership. However female supervisors are relatively weak in this respect and tend to be emotional, which is one of the important factors influencing their career development (Qian Yaling, 2009). In the traditional roles, obedience, conceit, and emotion control, have influenced the performance of female managers' leadership. Female leaders need to avoid forming negative personality traits (Zhang Yong, 2011). In terms of improving the ability and quality of female managers in enterprises, female managers need to cultivate this sense of competition, enhance their promotion motivation, pay attention to emotional management, and be able to correctly understand themselves. In reality, enterprises have the requirement of "bisexualization" for female supervisors.

### **Charisma:**

In management, the charisma of managers can influence this relationship with followers (Nohe et. al, 2013), which means "symbolic leadership influence is rooted in emotion and ideological foundation" (Antonakis et. al, 2011). According to a survey, employees can perceive it managers can evaluate status quo from the perspective of resources, constraints and employees' needs and the ability to set and communicate collective goals. Managers are charismatic when they are able to establish trust in these goals and demonstrate how to achieve them through exemplary actions (Conger & Kanungo, 1987; Cremer & Knippenberg, 2002). According to Vercic (2010), the

conceptual measurement of charisma is developed. Managers use vivid words and communication strategies to stimulate employees' work emotions and inspire them to create value for the enterprise (Antonakis et al, 2011; Verburg, 1997; Shamir et al, 1993). Women have better intuition than men, and that is the value of female executives (Dong Fangfang, 2007).

This section has concluded that the power of leadership is a linear conceptual chain that involves leadership, leadership process, leadership behavior, leadership ability and leadership knowledge. Five forces model of leadership is composed of the following elements: the foresight to determine the group goals of the organization, the charisma and influence to attract employees, the decision-making ability to control the development direction of the organization, and the control ability. The components of female leadership in Taiwan-funded enterprises in mainland China can be divided into six aspects: communication ability, management innovation ability, command response ability, personnel integration ability, emotion management ability and charisma. The section has also pointed out the importance of leadership enterprise management.

## **2.2 Individual factors**

Executive leadership is subject to the specific conditions of different individuals, including gender, age, personality traits, education level, working time, mental state, health status, environmental adaptation, personal appearance and other aspects. The individual factors include: gender, age, education level, working hours and so on. Besides the individual factors such as education level, personality characteristics, level of position and years of working experience, the appearance, moral quality and physical and mental health of a woman also have a significant impact on her leadership.

Dong Fangfang (2007) argued that no matter how much each person's cultural background is different, in a group or organization, the manager is inseparable from the group or organization members, and managers' leadership is mainly manifested in the managers' good moral quality, which is the basic factor of managers' leadership. Personality and charisma are generated by the manager's own conduct and work style and personality will also affect the employees and subordinates. Managers and employees in enterprises in mainland China are influenced by traditional Chinese culture imperceptibly and take moral quality as an important factor to evaluate female supervisors. Compared with male managers, female managers are not only in charge of a company, but are also attractive women themselves. More and more female managers realize that if they want to be a successful female manager, good appearance and image will have a certain influence on them. Similarly, the importance of moral character cannot be ignored. In terms of gender, women are widely considered are weak, sensitive, submissive and easily emotional. Lacking calm, rationality, capability, strength, sociability and other characteristics are perceived to be the characteristics of men. As a result, women lag behind men in executive leadership. However, as women keep leaving the house to work, they are becoming more and more knowledgeable, their personalities are becoming more liberated, and their educational level has been improving continuously. Their unique delicacy, tenderness, affinity and tenacity have been increasingly liked and appreciated by society. Many companies value these gender advantages over women and prefer to place men in executive positions. Women use specific gender advantages to compensate for the lack of gender inferiority in men.

In terms of age, for a company to achieve sustainable development, it is necessary to form a reasonable age echelon with the elderly and young people. The elderly can play the role of those who "transmit, help and lead" for the development of enterprises. Young people are the hope of enterprise development, as young people are full of



vigor and vitality, good at learning and willing to accept new things. They work with passion to make progress, think quickly, dare to break the frame, challenge authority, challenge traditional thinking, pursue truth and are willing to innovate. For female business executives, there are chores at home when young and pressures at work. Caring the elderly at home and educating children while responding to the company and leading the team to have innovative outcomes. It is a stressful loading for both body and mind. When a woman reaches middle age, while her body and energy are reduced, she has richer managerial experience, stronger interpersonal skills and finds it easier to solve problems. However she might also face the challenge of catching up with young people, which in some ways, might affect the performance of women in the leading roles (Zhu ZhiJun, 2017) .

Education is teaching and cultivation. It is a practical activity to explain various phenomena, problems or behaviors based on existing knowledge and experience. It can teach the most objective understanding to others. It is also a process of teaching and educating people, and is a kind of practice to improve people's comprehensive quality. Therefore, the situation of receiving education will largely influence the people's way of thinking, their depth of thinking and their breadth of thinking, which will affect their life purpose and their world view. From the perspective of human resources, given the same job level, managers with lower education are less likely to accept new things, which makes it difficult for them to keep up their pace with progress. People with a higher education level have a wider horizon and a stronger understanding ability. They are more receptive to new things, can adapt to more easily new situations, and are better at communicating with subordinates (Zhang Feng, 2017). Therefore, this study expected that the female manager with higher educational level would be better leaders than those with lower educational level.

In terms of working period, managers with long working period often solidify their authority and prefer to apply certain management mode. But they can also re-



examine their leadership behavior and deepen their leadership. The new supervisor, however, is often highly motivated and passionate. He or she can understand subordinates from the perspective of others and go deep into the basic level. He or she can communicate with subordinates openly and intimately, get along with the team, and strive to create conditions to provide them with more opportunities to learn, demonstrate their talents, and make progress gradually. As a new supervisor has just been pulled out of the bottom position, they understand more about the bottom level's situation. They are more willing to review their leadership behaviors. They are also good at planning and exploring new positions, gradually improving management methods and improving management level (Chen Youyong, 2016). There are therefore benefits and drawbacks in terms of length of working period.

In summary, this paper studied the leadership of business managers, in relation to their gender, age, educational level, and working period. Female managers make good use of their unique gender advantages to compensate what is missing in male's. When it comes to age, young managers are good at learning and innovative. Middle aged managers' management experience is richer, and there are managers can solve a problem leisurely. Women with higher educational level are better in leadership, while women with lower educational level are weaker. In terms of the working period, managers with long working period tends to adopt management mode. The young supervisor is good at exploring new positions and improving management level.

### **2.3 Organization characteristics**

Zhou Sanduo, professor of Nanjing university, in his monograph “*Histology*” proposed that organization is a stable and formal structure, consisting of two or more people with certain goals, certain resources and certain power and responsibility

structure. The specific characteristics of an organization can be summarized as the following: firstly, it needs to have a clear goal, and the goal is the result of the combination of external environment and the organization's own desire. Identifying organizational goals is the most important thing in any organization. The direction of the organization can only be determined with a clear goal. Though the goal is subject to and influenced by the resources and cultural environment in which it is situated. Secondly, the organization needs to have some human, financial, and material resources. The people in the organization are the foundation of the organization's existence and development. Activities of the organization need people. Financial and material resources are the basic guarantee for the organization to achieve its goals. Furthermore, the organization should have a clear structure of authority and responsibility. A clear hierarchy of responsibility structure is conducive to clear task bearers, organizational task implementation, clear definition of responsibility, equal rights and responsibilities. Hulme (2006) in *"What Makes a Good Leader?"* posited that leaders need to have the ability to build a convincing environment, an efficient team, a partner who can work together for win-win results, and the ability to manage the systems and mechanisms of their employees. Therefore, organizational factors have a certain influence on the leadership of managers. Whether female executives can develop in the enterprise should not only take their own factors into consideration, but also be linked to their own employment concepts. The organization's concept of personnel belongs to the scope of corporate culture. Good organizational process rules help female executives avoid organizational barriers and promote their leadership and career advancement. Female supervisors put great importance to the procedures and rules in the organizational environment where they work in. Female managers need to integrate themselves into the organization and influence others through their own charisma. Organizational adaptation is one of the important factors influencing the leadership of female managers. The effectiveness of work is inseparable from the

support of superiors and subordinates. The support and help within the organization are conducive to the stable performance of female leadership. The availability of the growth opportunity within the organization is a career bottleneck faced by female managers and even senior managers. (Dong Fangfang, 2007)

The scale of the organization and the rules and mechanisms of the enterprise are conducive in providing positions for female managers. Benign organizational culture and rules and regulations are conducive to the career development of female managers. The effective assistance and support provided by organizations in different industries for the career development of female managers are different, and the development opportunities and promotion opportunities provided by organizations for female managers are fewer than those of male managers under the same conditions. The same is true for training opportunities, work experience, etc. The organization should abandon the prejudice against women's characteristics and abilities, view their advantages and disadvantages in a correct way, provide multiple types of positions and increase the encouragement mechanism, explore the potential of female managers in different management levels in the enterprise as much as possible, and effectively help female managers plan their career (Gong Xue, 2008) . An open and democratic management style enables every employee to participate in management. With the support from the top, the middle managers can make decisions with confidence and give full play to their strengths. A clean and quiet working environment can make people happy physically and mentally, and they are more willing to be busy in their work, which makes them more efficient (Yuan Xiaowen, 2013).

To sum up, the organization is a stable and formal structure, and organizational factors have certain influence on the leadership of managers. Organizations provide women managers with fewer opportunities for development and promotion than men under the same conditions. The size of the development space within the organization is a career bottleneck faced by female leaders and even senior leaders. Organizations

should shed their prejudices about women's characteristics and abilities and provide multiple types of positions to effectively help women managers plan their careers.

## **2.4 Cultures**

Every country has its own culture, which is rooted in its worldview and value system. The culture of each nation has its own particularity. As an important part of society, enterprises are subject to local, social ideology and cultural tradition and cannot be separated from the dominant social value system. Therefore, the development of enterprise activities cannot get rid of the shackles of social culture and value system. As for the enterprise manager, the way of thinking and management philosophy cannot be separated from the influence of society, and he/she must be subject to his/her social and cultural background (Lin Feng, 2008). The culture of organization includes values, beliefs, attitudes, and behaviors that employees share and use every day at work. This culture determines how employees describe where they work, how they understand the business, and how they see themselves as part of the organization. Culture is ultimately the whole expression of an organization. Organizational culture is regarded as an extreme phenomenon, which represents the quality of the social atmosphere within the organization and determines the dominant work status of all employees. However, arriving at a definition is difficult because it represents a phenomenon that can attract emotions more than the rational consideration of observers (Mohelska,& Sokolova, 2015). The culture of an enterprise can constitute the soft environment of the enterprise, and the multi-culture of an organization can affect the way that the organization treats different groups. Organizational culture contains the group's understanding of non-discriminatory, inclusive and pluralistic values. For companies and enterprises to better build corporate culture, they need to eliminate occupational gender discrimination, promote

cultural diversity and increase inclusiveness and other specific goals and efforts. This includes achieving equality between men and women in recruitment. Ensure equal opportunities for men and women in staff assessment and promotion systems. For the development and management of human resources, the investment opportunities of human capital of employees of different genders can be equalized. The integration of corporate culture is the key to the smooth development of Taiwan enterprises (Xu Jianxing, 2009).

Culture is considered an important factor in the success of the business world organization. Organizations take very different approaches to building a quality work culture. In some organizations, a high-quality work culture is essential to ensure that employees provide better services to customers. An ideal work culture is one of the elements that corporate employees need, which includes shared institutional values, priorities, incentives and other practices that promote inclusion, high performance and commitment while allowing for diversity of thought and action. It can be seen from this that the work culture of an enterprise can be regarded as the practice of an organization, which is reflected in the norms, common values, and basic assumptions of all members in the organization. In order to maintain the competitiveness of the market, it is very important for an organization to create a favorable working environment for its employees. Good treatment of employees will also benefit the organization. The work culture in an organization has many key values. It usually promotes adaptability for accountability, equality, cooperation, commitment, effective communication, empowerment, flexibility, high morale, professional dedication, trust, continuous quality improvement and respect. There are implemented in most organizations. By having all these key values, enterprises will run smoothly and avoid some unnecessary mistakes. A good and effective organization must have a work culture that supports the development of its employees. In terms of mission and vision, a clear goal can lead the enterprise to success in the future (Ali et al, 2015).

In short, the management efficiency of enterprise managers must be subject to their social and cultural background. The culture of an enterprise can constitute the soft environment of the enterprise. Culture is the overall expression of the organization, and culture is considered as an important factor for the success of the business world organization. A high-quality work culture is essential to ensure that employees provide better services to customers. A good and effective organization is bound to have a corporate culture that supports the development of its employees, and a good corporate culture is bound to bring success to the enterprise.

## **2.5 Management style between genders**

The management style of female leaders is more socially oriented. Female leaders strive to be reasonable in decision-making, which is totally different from male managers who only emphasize rationality (Tu Lixia, 2004). Ding Lifang (2007) studied the characteristics of women in business management and proposed that compared with men, women are more suitable to be in charge as a manager. Ding argued that women have ten advantages, such as being firm, persistent, good at guiding, innovative, inspired, open to new ideas, clear decision-making, cooperative, practical and considerate. Even men admit to prefer female bosses. According to the survey, the management style of female managers is that they are good at cooperating with others, have self-knowledge, respect and care for others, look at things objectively, have a high sense of responsibility and initiative, and know how to use others well. In the theory of female leadership style, it is concluded that female leaders pay attention to communication with others, focus on the success of groups and good interpersonal relationship in the management process. (Helgesen, 1995, Judy, 1990). The management style of female leaders is flexible. They are more willing to listen carefully to others' opinions and suggestions, think from another's



perspective, put themselves in the position of subordinates, and respect other people's work achievements. It is also relatively easy to establish the image of female leadership in employees as a kind and generous one (Barbara, & Rajvinder, 1992). The "feminine" management mode of flexibility and interpersonal communication is conducive to the establishment of an efficient and collective organization. From a long-term perspective, the trend of future social development is the flexibility of work, while women are more fully equipped with collective synergy and flexibility than men (Janel et al,1994).

Hulme (2006) argued that normative of male speaking patterns is associated with roles of leadership and authority. In the business world, good leadership qualities include authority, rigidity, decisiveness, positivity, competitiveness, and goal-orientation. He summarized the characteristics of the interactive style of men and women in the enterprise : men prefer competition, actively participate, antagonistic, direct, autonomous, lead a dominant discourse power, and task orientation in the enterprise. Women, on the other hand, prefer convenient and supportive feedback, reconciliation, indirection, commonality, secondary contribution, process-oriented and emotion-oriented. However, these results are not absolute, but relative, as the diversity of other variables and multiple sources (such as age, class, etc.) need to be considered. It is just a deliberate summary. The leadership style of women is mainly transitional and interpersonal, while that of men is based on command and control (Hans, 2011).

Management style can be divided into two categories: transactional and transformational. Transactional management means that followers agree, abide by or accept the manager in return for rewards, praise and resources, and avoid disciplinary action. In transformational management, the manager encourages the subordinates' wishes for the benefit of the organization. Thus, the subordinates can fully realize their potential. There is a significant difference between male and female management

styles. Female managers are considered to be transformational, while male managers are mainly transactional. Although managers with transactional management style will motivate employees to behave as expected, managers with transformational management style have the ability to motivate employees to perform beyond the expected performance level (Norlina et al, 2015).

Hulme mentioned in his book-"*What Makes a Good Leader?*" that leaders need to have the ability to build a convincing environment, an efficient team, a partner who can work with for win-win results, and the ability to manage the systems and mechanisms of their employees. An open and democratic management style enables every employee to participate in management. With the support from the top, the middle managers can make decisions with confidence and give full play to their strengths. A clean and quiet working environment can make people happy physically and mentally, and they are more willing to focus on their work, which makes them more efficient (Yuan Xiaowen, 2013). In the process of management, female managers pay special attention to effective communication with employees, which can create a working atmosphere of unity, friendship and efficient cooperation for the organization. This is the theory of female management style (Heigesen,1990). Female executives are better at communicating and cooperating with their management style (Tu Lixia, 2004). When female executives and male supervisors are compared, the main advantage is in terms of communication, language expression, and many others., Outstanding women leaders are good at and emphasis on the application of non-power influence, through the use of motivation, communication, coordination, guidance, such as flexible management style, to create a good working environment and working environment, staff care and training staff, effective communication, and communication with employees than men in such aspects as manager. This also is helpful for work (Qian Yalin 2009; Gong Xue, 2015). In an empirical study by Rolkovaa and Farkasovaa (2014), it was found that there were no significant

difference in the management style of female and male managers in letting employees participate in decision-making or in the possibility of assessing their participation.

To sum up, management style can be divided into two categories: transactional style and transformational style. Managers with transactional management style, for the main part, will motivate employees to behave as expected, but managers with transformational management style have the ability to motivate employees to perform beyond expectations. There is a significant difference between male and female management styles. The management style of male directors is mainly transformational, while the management style of female leaders is more social-oriented, and focuses on effective communication and communication with employees. Opening and democratic management style of women is conducive to building an efficient and effective collective organization. Male managers tend to be transactional. Men's leadership styles are based on command and control, but the Achilles heel is impatience, assertiveness and poor coordination.

## **2.6 Gender differences in working environment**

Traditional Chinese culture and gender stereotypes tend to label and bind women. Although the culture is constantly adjusting, the traditional concepts of "male leads the family " and "male is superior to female" still exist in most people's thinking. To women, family happiness means successful and important. Compared with women, men are always in a position of domination and strength. Women are in a position of disadvantage and weakness, which puts men and women in an unequal starting line (Gong Xue, 2008).

According to the data, 1,169 listed companies in mainland China in 2008, there is no direct correlation between the managers' gender, educational background and the performance of the companies they operate (Chen ZhiGang, 2009). There is a

complex relationship between female leadership and enterprise performance. In enterprises with weak shareholder rights and interests, female leadership can bring more positive impacts on enterprise benefits. On the contrary, gender difference will bring a negative impact on the enterprise's benefit in the enterprise where the shareholder's rights and interests are well protected (Li Wei, 2010).

During the two world wars, women in the United States were employed mainly in business, service industry, handicraft industry, and other fields. This made the American economy and businesses sustainable. After the war, men came back and women were replaced. In the "*Theory of Human Capital*", the American economist Schulz argued that due to women's innate motherhood, they are more likely to choose family between work and family. For a rational market participant, the value of female employees is far less than that of male employees, therefore, the development and growth opportunity and platform for women is much smaller than that of men. Female leaders also lack opportunities for growth compared to their male counterparts. From the perspective of gender theory, female leaders are more susceptible to the influence of social environment in their career development, which may be either a driving force for the development of female leaders themselves or a stumbling block to their development.

In today's context, women take multiple roles in the society, family and work. Children at home and the housework bundle are the factors that affect women's work. Other than taking the job position, they need also to take into account mostly family matters. It is difficult for women to have extra time to think about how to improve themselves in the work place, and how to improve their ability. In contrast, for women who have no children, might have much more opportunity to handle their work and can grasp the opportunity of promotion. They also have more time at their disposal to learn and practice to improve themselves. Multiple roles make female executives subject to stress from different aspects. However, it also encourages

women to improve their compressive capacity, demonstrating positive initiative and strong endurance. They give off a sense of mission and sense of responsibility at work and drive the subordinates and staff to work for the enterprise and provide excellent performance.

In 1986, a *Wall Street Journal* column used "glass ceiling" to describe women's leadership. Female executives in enterprises or organizations gradually climb to the top according to their own career development, but when approaching the top, there will be an invisible barrier in front of them. These female executives can only reach that certain status as there are obstacles to block their way like a transparent glass ceiling. In addition, there has always been the term "gender stereotype" in society, which mainly refers to a soft and flexible dress, the voice and management style of female supervisors, which will also cause certain difficulties for female supervisors. Female supervisors lack certain decisiveness in their management. It is because of these stereotypes that female executives are perceived as lacking seniority to be leaders, which results in them missing out on many promotions (Bowman et al, 1965). Furthermore, work and family relations remain in conflict, there is no synchronization between these two roles. When a person's time and energy are insufficient to cope with two different types of role, there will be a conflict, which is known as work and family interference. Compared to men, women face higher conflict between work and family (Frone, 1992; Behson, 2002). The supportive attitude and behavior of the husband can effectively alleviate the conflict between the wife's work and family (Beutell, & Greenhaus, 1983).

According to a survey report on the development of Chinese female entrepreneurs by the *China Women Entrepreneurs' Association in 2016*, female managers share the same behavior with men in terms of behavior characteristics, value orientation, leadership style, and management style, but there are also some differences. Female supervisors tend to be more flexible, pay more attention to the development of

employees, focus on the cooperation between employees and customers, and deal with each other harmoniously. Female supervisors have relatively high happiness and satisfaction levels. In addition, female supervisors pay more attention to internal growth and have less dependence on external context, which also supports the notion that female supervisors have strong ability to sustain job crisis. However, such a sound development model is more difficult to realize in the rapid expansion of enterprise scale and the need to introduce excellent talents. There are also the main factors restricting the continuous expansion and strength of enterprises run by female managers. The survey also found that balancing career and family is still a woman's dilemma. Women make more efforts than men to advance their careers. More than 90 per cent of female entrepreneurs surveyed said their families were "more supportive" or "very supportive" of their careers. As long as there is sufficient support from the family, women managers can manage their career and family appropriately, said Li Lan, a member of the Chinese Women Entrepreneurs Association.

Since 1980, the number of women earning higher educational degrees in the United States has actually far exceeded that of the men. Compared with men, the family income and social wealth brought by professional female executives are increasing. According to the UN "*World Women 2000*" report, the proportion of women in administration and management level is on the rise. In his book "*Leadership: theory and practice*", Peter G. Northouse pointed out that there are three reasons why enterprise female managers can stand out among others: productivity improvement, competitive advantage and financial performance. They perceive that women should have equal opportunities as men. The ability of female executives should be demonstrated on a wider platform. Women, as executives, deserve recognition for their contributions to the enterprise, particularly their experience, values and behaviour. As a female, female executives have a unique perspective, which can enrich the organizational team of enterprises (Alvesson, & Due, 2000).



Female executives focus on procedures and rules in the organizational environment in which they work. Female managers need to integrate themselves into the organization and influence others through their own charisma. Person-organizational fit is one of the important factors influencing the leadership of female managers. Support and help from the upper and lower levels of the organization is conducive to the stable performance of female leadership.

Due to the influence of the concept of "gender difference" in the long feudal society of China, women are weak, sensitive, submissive and prone to emotion. Lack of calm, rational, capable, strong, social and other characteristics of men; Result in women lagging behind men in executive leadership. As a matter of fact, as women keep going out of the house, they have gained more knowledge, their personalities have become more liberated, and their education level has continuously improved. Their unique delicacy, tenderness, friendliness and tenacity have been increasingly liked and appreciated by society. Women use specific gender advantages to compensate for the lack of gender inferiority in men.

It can be seen that from the perspective of female's gender advantage, such as, female communication which is more euphemistic and softer than that of male, it is easier to be accepted by subordinates. As a department head, women are more likely to use a kind of maternal love to communicate with and trust the department and inspire the enthusiasm of the department, so that the department in charge has a stronger collective consciousness. Second, female managers deal with some tough problems with less impatience; they are calmer and more patient. Attention is paid to guidance with care and encouragement. Over the years, the departments where women are in charge have a better harmonious relationship among each other. Female supervisors perform well, and management improve even more. However, the custom of female inferiority and male superiority formed by thousands of years of national culture cannot be completely eliminated. Women's responsibility in the family and

children's education, women's own congenital maternal love feelings, cannot be completely removed. In fact, they are unwilling to give up their family duties. The responsibility to perform as a wife and mother at home and as a department head in the working place is also difficult for women, which, to some extent, restricts the career development of women. However, when national policies and systems are ready, social ethos is improved, and enterprise environment is humanized and when, female managers are supported by their families, women are willing and ready to be an entrepreneur and gender does not necessarily influence leadership performance.

## **2.7 Type and stages of an enterprise**

In a study on the preferred leadership archetype of male and female leaders in 27 countries, Paris et. al. (2009) found that due to the differences in industries, female managers prefer participatory, leading and charismatic style of leadership. In the electronic information industry, the leadership of female managers is more inclined to the masculine leadership, such as less participation, less team leadership, and less charisma value. In the financial and food industries, the leadership of female managers is based on charismatic value and they are good at increasing participation in the team. In traditional industries, male managers have more stable work attitude, firm working goals and extensive social skills than female managers, which is also the main reason why male managers have better leadership than women. In the restaurant industry, female managers are more likely to use their gender advantages and make up for their disadvantages in traditional industries.

Zhang Xuemei (2015) found that the leadership performance of managers in non-state-owned enterprises was significantly higher than that of managers in state-owned enterprises. Similarly, it can be seen that the leadership of female managers in non-

state-owned enterprises is higher than that of female managers in state-owned enterprises.

In different stages, the influence of the enterprise on the supervisor is nothing more than on the personal development prospect, adaptability, interpersonal relationship status and standard implementation (Ma Libo, 2007). For the career development of female managers, the industry type and scale of their working unit, the culture of the company, the human context, the positions they can provide, and the scope they can manage have influence on their leadership (Gong Xue, 2008). Among Taiwan-funded enterprises, they mainly pursue hierarchical management philosophy and strict management style. Most Taiwan-funded enterprises in mainland China have continued this management mode (Ma Chunmiao, 2015).

## **2.8 Summary of the literature reviews**

This chapter gives a brief overview of the composition and influence factors in female leadership. Many Chinese and western scholars have done relevant studies on the topic. Communication skills, command skills and personnel skills are very important for general leadership. In this study, female leadership was studied. Based on previous research results, the leadership components of female managers were summarized as communication ability, management innovation ability, command response ability, personnel integration ability, emotion management ability and charisma. Due to the characteristics of women themselves and the particularity of the environment they face, there are many factors affecting the leadership of these female managers. Combined with previous studies, the factors affecting the leadership of women in Taiwan-funded enterprises in mainland China are divided into three aspects: individual factors, organizational factors and cultural factors.

## 2.9 Research model construction and hypotheses

This study investigated the influencing factors in female supervisor leadership in Taiwan-funded enterprises in mainland China and the core elements of supervisor leadership. Based on previous research results on leadership and its influencing factors, the influencing factors are divided into culture-related factors, organization-related factors, and personal related factors. From these three perspectives, the leadership of female supervisors in Taiwan-funded enterprises and their influencing factors were established. The research model was constructed, and then the research hypotheses.

According to the relevant theories of management science, leadership includes communication ability, affinity and subordinate ability, ability to do things, learning ability, personnel integration ability, decision-making ability, management innovation ability, situation judgment ability, and command-response ability. Based on the analysis of previous articles, and the research results on existing leadership and women's leadership, I eliminated the highly overlapping parts, selected leaders with large differences between different genders and selected extremely critical communication skills, management innovation capabilities, command response capabilities, personnel integration capabilities, emotional management capabilities, six charisma elements. These elements are both essential for leadership and key elements that women differ from men and influence the leadership of female supervisors. After the study on these elements was done, conclusions were on these drawn that were targeted and practical.

There are many factors that affect the leadership of female supervisors and these, include internal factors and external factors. Chen Weijuan (2010) summarized the factors affecting women's leadership into two aspects: moral character and society; Gao Jingjuan (2015) summarized the factors affecting women's leadership into :

individual factors, organizational factors, and environmental factors. It was proposed in this study that the social, cultural, organizational, family, and individual levels have a significant impact on women's leadership. On the basis of these achievements and the unique situation of Taiwan-funded enterprises, this study summarizes the influencing factors on women's leadership as cultural factors, organizational factors, and personal factors in order to reflect more appropriately on the practical problems pointed out in this research.

Therefore, Table 2.1 summarizes previous concepts of elements in this study:

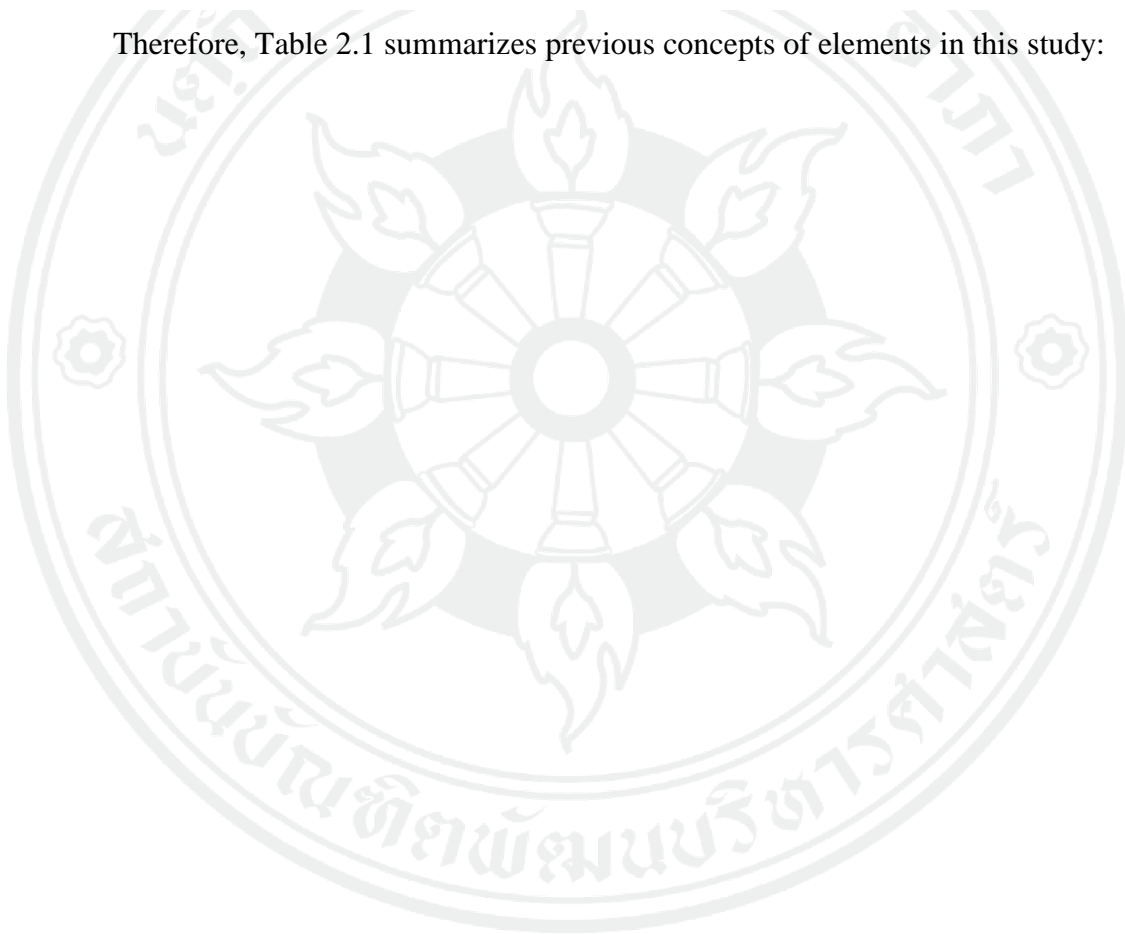


Table 2.1 the previous concept of elements in this study

Element concept	Meaning	Literature reference
<b>Cultural factors</b>	The traditional male-dominated historical and cultural factors in China; corporate culture is subject to local social and cultural dominance and is diversified and inclusive.	Lin Feng, 2008; Gongxue, 2008; Zhang Qingtao, 2009; Norlina M. Alia*, Rohani Jangga, Mazlina Ismail, Siti Nuur-Ila Mat Kamal, and Mohammad Nazri Ali (2015)
<b>Personal factors</b>	Individual conditions including age, gender, education level, length of service, job level, etc.	Tu Lixia (2004); Dong Fangfang (2007); Zhang Xuemei (2015); Qu Ningning (2016); Chen Youyong (2016); Zhu Zhijun (2017)
<b>Organization</b>	Development opportunities provided by organization to women leaders, including the importance and training of women leaders, the degree of investment and the degree of attraction (remuneration, working conditions, etc.). The role and values of female leaders are compatible with the company's corporate culture and work atmosphere. The company will clarify and standardize the work and carry out work in accordance with certain rules and procedures. The degree to which the upper and lower levels within an organization help each other.	Dong Fangfang (2007)
<b>Industry type</b>	Different industries reflect different technologies, markets, strategies or historical traditions of culture and climate.	Lori D Paris, Jon P .Howell, Peter W. Dorfman and Paul J Hanges, 2009,
<b>Leadership</b>	Refers to the influence at work.	John C. Maxwell (2003)
<b>communication ability (Communication skills)</b>	Refers to the ability to properly handle and coordinate work through communication.	Tu Lixia (2004); Dong Fangfang (2007); Qian Yaling (2009); Chen Weijuan (2010); Zhang Xuemei (2015); Hana Mohelska, Marcela Sokolova (2015)



Element concept	Meaning	Literature reference
<b>Management innovation ability</b>	Refers to the ability to have innovative thinking in management.	Tu Lixia (2004); Hulme, Virginia A (2006); Dong Fangfang (2007); Zhang Xuemei (2015)
<b>Command ability</b>	Refers to the ability to be calm and flexible in special circumstances.	Hulme (2006); Dong Fangfang (2007); Chen Weijuan (2010);Zhang Xuemei (2015)
<b>Personnel integration ability</b>	Refers to the ability to know the good use of people in the work, the length of employment, and the rational distribution of manpower and material resources.	Hulme, Virginia A (2006); Dong Fangfang (2007); Qian Yaling (2009); Zhang Xuemei (2015);
<b>Emotional management skills</b>	Refers to the ability to stay calm at all times at work, to be able to reasonably self-control emotions under stress and to soothe others.	Dong Fangfang (2007); Qian Yaling (2009); Gong Xue (2015); Zhang Xuemei (2015);
<b>Charisma</b>	Symbolic leadership influences are rooted in emotional and ideological foundations	Verčić (2010); Antonakis, FenleyampLiechti (2011);Nohe, Michaelis, Menges, Zhen Zhang, Sonntag (2013)

(Source: summarized by researcher)

### 1. Personal Factors:

The leadership of corporate managers is subject to the specific conditions of individuals, and the leadership of managers is mainly reflected in the subordinates they manage. The managers' own conduct, style of work, personality, as well as their appearance . will affect the subordinates. Meanwhile, the importance of moral character cannot be ignored. Female-specific gender characteristics have advantage in the team development. Women with higher levels of academic qualifications have higher leadership performance. For the length of service, it shows a mixed result. The charisma of managers has benefit in leading employees to complete work tasks with higher quality.

As personal factors are the main theoretical factors of this study, the following hypotheses were made on the individual factors:

H1: Personal factors have impact on the leadership of female supervisors in Taiwan-funded enterprises in mainland China.

H1a: Gender affects the leadership of female supervisors in mainland Taiwan-funded enterprises.

H1b: Age affects the leadership of female supervisors in mainland Taiwan-funded enterprises.

H1c: Education level affects the leadership of female supervisors in Taiwan-funded enterprises in mainland China.

H1d: Working years influence the leadership of female supervisors in mainland Taiwan-funded enterprises.

H1e: Job position affects the leadership of female supervisors in Taiwan-funded enterprises in mainland China.

H1f: Industrial type affects the leadership of female supervisors of Taiwan-funded enterprises in mainland China.

## **2. Organizational Factors:**

An organization is a group of two or more people who have certain goals, certain resources, and a specific accrual structure. Organizational factors have influence on the managers' leadership. The concept in managing the employees of an organization is categorized as corporate culture. Good organizational rules support and promote the leadership of female managers. Organizational adaptation is one of the important factors affecting the female managers' leadership. Different organizations provide different career development programs for female managers. Organizations should abandon prejudice about women's characteristics and abilities and help women managers plan their careers effectively. A relatively clean and quiet working environment make people physically and mentally happier and more efficient.

Organizational factor is one of the main theoretical factors of this study. The following hypotheses were made:

H2: Organizational factors have an impact on the leadership of female supervisors of Taiwan-funded enterprises in mainland China.

H2a: Rules or procedure have impact on the leadership of female supervisors in Taiwan-funded enterprises in mainland China.

H2b: Organizational adaptation has impact on the leadership of female supervisors in Taiwan-funded enterprises in mainland China.

H2c: The internal support of the organization has impact on the leadership of the female supervisors in Taiwan-funded enterprises in mainland China.

H2d: Growth opportunity within the organization has an impact on the leadership of female executives in Taiwan-funded enterprises in mainland China.

### **3. Cultural Factors:**

As part of society, an enterprise cannot be separated from its social culture and value system. Enterprise managers' thinking style and management philosophy are subjected to their social and cultural background. Corporate culture determines the dominance of their job position. To construct a better corporate culture, the company needs to eliminate gender discrimination, promote cultural diversification, increase inclusiveness as well as other specific goals and put efforts to sustain these actions. It is critical for mainland Taiwanese enterprises to integrate a proper corporate culture. The working culture of an enterprise is important as a good working culture supports an effective organization through the development of their employees.

The following hypotheses were thus constructed:

H3: Cultural factors have impact on the leadership of female supervisors in Taiwan-funded enterprises in mainland China.

H3a: Traditional culture has an impact on the leadership of female supervisors in Taiwan-funded enterprises in mainland China.

H3b: Corporate culture has an impact on the leadership of female supervisors in Taiwan-funded enterprises in mainland China.

In summary, Figure 2.2 illustrates the conceptual framework of this study:

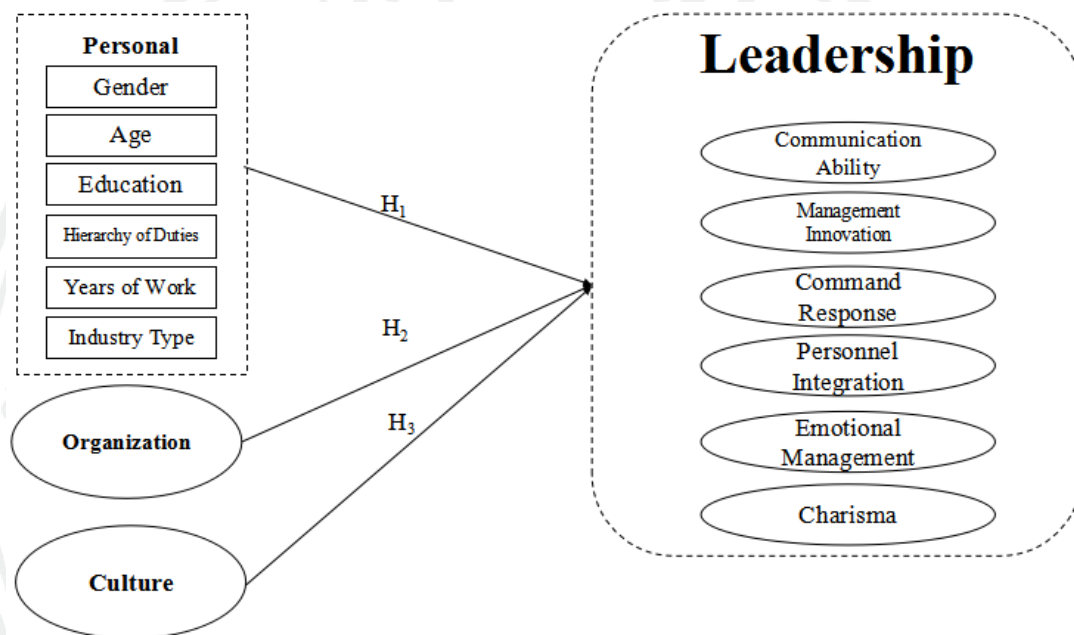


Figure 2.2 Illustrates the conceptual framework of this study

Variables	Operationalized Definition	measuring scale	Scale Source
<b>Personal factors (Personal Factor)</b>	Demographics including age, gender, education level, length of service, job position, etc.	PF1: birth date. PF2: Gender PF3: Level of education PF4: Job position PF5: Years Working in Taiwan-funded Enterprises	
<b>Industry type (Industry Type)</b>	Different industries reflect different technologies, markets, strategies or historical traditions of culture and climate.	IT1: Your Enterprise Category	
<b>Cultural factors (Cultural Factor)</b>	The traditional male-dominated historical and cultural factors in China; corporate culture is subject to	CF1: Although society is getting open-minded, women are still not recognized as senior	Gong Xue (2008)

Variables	Operationalized Definition	measuring scale	Scale Source
	local social and cultural dominance and is diversified and inclusive.	managers. CF2: Though culture is modernized, the traditional concept of " male masters the external jobs" still dominates. CF3: The corporate culture is diverse and inclusive.	

(Source: summarized by researcher)

## 2.10 Measurement scale of constructs

Variables	Operationalized Definition	Measuring scale	Scale Source
<b>Organizational Factor</b>	Development opportunities provided by the organization to supervisors, including the importance and training of women leaders, the degree of investment and the degree of attraction (remuneration, working conditions, etc.).The role and values of female leaders are compatible with the company's corporate culture and work atmosphere. The transparency and standardize of work, rules and procedures. The degree to which the upper and lower levels within an organization help each other.	OF1: The company treats training and cultivation supervisors importantly. OF2: The current job enables supervisors to fully perform their jobs. OF3: The company provides a broad opportunity for career development. OF4: Supervisor is generally satisfied with the current job. OF5: The company pays good salary. OF6: Supervisor can take responsibility for their job. OF7: He (she) is well adapted to the company's work spirit and management culture. OF8: His or her values and characteristics are consistent with the company's requirements for employees. OF9: He (she) is very comfortable with the company's working atmosphere. OF10: The present job and duties match his/her expectations. OF11: In the current company he or she has the opportunity to get promoted and grow. OF12: His (her) career has progressed smoothly. OF13: The company has clear regulations on work tasks. OF14: The internal management of the company emphasizes the work process processing. OF15: The company determines	Dong Fangfang (2007)

Variables	Operationalized Definition	Measuring scale	Scale Source
		career promotion with certain standards. OF16: All departments work according to the rules and regulations. OF17: Does his (her) immediate supervisor understand the problems and needs in his (her) work? OF18: No matter how much formal power his (her) immediate supervisor has in his (her) position, how likely he is to use his (her) power to help him (her) solve problems at work. OF19: No matter how much position power his (her) direct supervisor has, how likely is he to justify him (her) even at any cost? OF20: He (she) has enough confidence in the direct supervisor. If he (she) is not present, his (her) direct supervisor will defend his (her) decision. OF21: What is his or her working relationship with direct leadership? OF22: What is his (her) working relationship with other members of the department? OF23: How likely do you think it is that his (her) department will do its best to help him (her) work?	

(Source: summarized by researcher)



Variables	Operational Definition	Measuring scale	Scale Source
<b>Ability to Communicate</b>	Refers to the ability to properly handle and coordinate work through communication.	ATC1: He or she is good at communicating with various personalities. ATC2: He (she) is able to listen and accept different opinions patiently. ATC3: His or her work is focused on the problem of overall situation.	Dong Fangfang (2007)
<b>Management Innovation Ability</b>	Refers to the ability to have innovative thinking in management.	MIA1: He or she can change his or her management ideas and methods in times when it is needed. MIA2: He (she) encourages employees to establish innovation awareness and improve innovation capabilities. MIA3: He or she can boldly innovate management methods and complete work tasks efficiently.	Dong Fangfang (2007); Zhang Xuemei (2015)
<b>Command and Strain Capacity</b>	Refers to the ability to be calm and flexible in special circumstances.	CASC1: He (she) can solve sudden problems calmly and flexibly. CASC2: He or she can scientifically arrange time and allocate tasks effectively and reasonably. CASC3: He or she is good at summarizing scattered materials and flexibly applying them to management.	
<b>Personnel Integration Capacity</b>	Refers to the ability to know the good use of people in the work, the length of employment, and the rational distribution of manpower and material resources.	PIA1: He (she) is good at discovering the strengths of others. PIA2: He (she) is good at uniting the upper and lower levels and closely cooperating with the completion of work tasks. PIA3: He (she) specializes in scientific arrangements to maximize the role of guarantors, materials, and finances. PIA4: He (she) cares for talents, cherishes talents, and is good at retaining talents.	
<b>Emotion Management</b>	Refers to the ability to stay calm at all times at work, to be able to reasonably self-control emotions under stress and to soothe others.	EM1: When under pressure, he or she can control emotions and calm others. EM2: He (she) is sensible and calm in his work and is not easily irritated. EM3: He (she) strives to strengthen efforts for team building and has a good working atmosphere.	Dong Fangfang (2007); Gong Xue (2015); Zhang Xuemei (2015);
<b>Charisma</b>	Symbolic leadership influences are rooted in emotional and ideological foundations.	C1: He (she) is an persuasive person (able to express himself clearly and happily). C2: He (she) is an honest person. C3: He (she) is a person who is always satisfied with life. C4: He (she) is very attractive. C5: He (she) is a very calm person.	Verčič2010

(Source: summarized by researcher)

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Research methods used**

For questionnaire survey. Based on the previous literature review, telephone interviews, and in-depth interviews, key influencing factors of women's leadership were obtained, and related questionnaires were designed. According to the principle of questionnaire design proposed by Feng Xiaotian (2013), clarifying the purpose, identifying the various factors that hinder the survey, and assuring various factors related to the study are crucial steps that need to be followed. The steps of questionnaire design include: exploratory work, designing the first draft of the questionnaire, trial test, revision, and printing. The questionnaire in this study was divided into three parts. First part is the demographics such as age, gender, education level, job position or title, and the working years of the respondent's direct supervisor. The second part includes the perceived leadership constructs of the respondent's direct supervisor. The composition factors and influencing factors were investigated. The third part is the respondent's suggestions and comments. The distribution of questionnaires among the participants in the survey, helped to provide the opportunity for the researcher to understand and grasp the subjective perceptions and judgments of employees in Taiwan-funded enterprises .

Statistical analysis. Data were examined and analyzed by using IBM SPSS 20 and AMOS 23. A five-point Likert scale for the variables was used to standardize answers in the questionnaire. SPSS 20 was used for descriptive and factor analysis, establishing the reliability and validity of the measurement model and the causal

relationship. Descriptive statistical analysis was conducted on the data of all variables in the research hypotheses, including the description of the basic situation of the survey, the mean and standard deviation of each variable on SPSS. AMOS test and analysis of the hypothesis of the path model of this study were conducted.

## **3.2 Data collection process**

### **3.2.1 Questionnaire design**

Based on the broad scope of study, the subjects of this study were the direct supervisors of the respondents. The content of the questionnaire in this study consists of four parts: the basic information of the direct supervisor, the perception toward the direct supervisor, the personal opinion of the respondent toward the direct supervisor, and others. Details of the questionnaire are given in the annex.

The first part is a survey of the basic information about the respondent that the supervisor is directly in charge of. The content consists of six questions, including age, gender, education level, length of work, job status, and type of enterprise.

The second part is a survey of the influencing factors of the leadership of the respondent's direct supervisor. The content is composed of 40 questions. Score on a five-point scale: 1- Strongly agree, 2- Moderately agree, 3- General, 4- Moderately disagree, 5- Strongly disagree.

The third part is a survey of respondents' personal perceptions of the factors that influence the leadership of their direct supervisors. The content consisted of 8 questions also in five points scores.

The fourth part is an open question, which was only used for reference in the study.

### 3.2.2 Sampling scope

Huai'an City is the only Taiwan-funded enterprise in the northern part of Jiangsu Province that has gathered more than 1,000 Taiwan-funded enterprises and has invested more than 10 billion U.S. dollars. Huai'an City has attracted more Taiwan-funded enterprises such as Kunshan. Therefore, Taiwan-funded enterprises in Huai'an City, Jiangsu Province were selected as the research target population.

### 3.2.3 Sampling size

According to Yamane's (1967) formula for sample size calculation 
$$n = \frac{N}{1 + N \bullet E^2}$$
, N represents the total number of respondents, E represents the maximum acceptable error, and n represents the required number of samples. In this study, through a telephone interview conducted by the researcher with the Taiwan Affairs Office of Huai'an City, Jiangsu Province, it is known that there are about 190,000 employees in Taiwan-funded enterprises in Huai'an City. Therefore, N is 190,000, given that e= 5%, and Yamane's sample size calculation formula is used. The number of samples needed to be drawn was 399.

The sampling method used in this study was based on multistage sampling. The method is suitable for social research with a large overall range and multiple object levels. (Feng Xiaotian, 2013). Taiwan-funded enterprises in Huai'an City are clustered in the High-tech Economic Development Zone. Therefore, only this administrative area was selected, and 10 Taiwan-funded enterprises were randomly selected. In this study 70 employees were selected in each Taiwan-funded enterprise. Data collection was conducted in the form of a paper questionnaire, which was set at 70% recovery and valid questionnaires rate. Thus, 700 questionnaires were distributed. According to the plan, this survey selected Ten Taiwan-funded companies such as Dafang

Electronics, Foxconn Technology Group, Huadali Group, and Thermos (China) Housewares Co Ltd in Qingjiangpu District and Hi-tech Development Zone of Huai'an City, Jiangsu Province, China. Each company was given 70 questionnaires and a total of 700 questionnaires was distributed. The actual collection period was from March 22, 2018 to April 22, 2018. A total of 650 questionnaires was collected, with a return rate of 92.9%. With the use of SPSS 20 to clean the data of 650 questionnaires, 4 incomplete questionnaires were removed, and 646 valid questionnaires remained. The recovery and valid rate of the questionnaire was 92.3%.

### **3.3 Descriptive analysis of the collected data**

#### **3.3.1 Basic information**

The first part of the questionnaire is the basic information about the direct supervisors of the respondents. The information includes age, gender, education level, length of work, job status, and type of business.

The frequency and percentage of the above items were analyzed using SPSS 20. The statistical results of the 646 valid sample information are summarized and shown in Table 3.1. The results are as follows:

(1) From the perspective of gender structure, 425 direct supervisors of the respondents were men, accounting for 65.8% of the total and 221 women, representing 34.2% of the total. The difference between the two is relatively large. It can be seen that the Taiwan-funded enterprises in Huai'an City, Jiangsu Province are still dominated by male supervisors.

(2) From the perspective of age structure, the direct supervisors of the respondents were between 31-40 years, accounting for 44.3% of the total. The second largest age group is 41-50 years, accounting for 27.6%. In general, among Taiwan-



funded enterprises in Huai'an City, Jiangsu Province, most of the supervisors are between 31-50 years of age.

(3) On the education level, the direct supervisors of the respondents were mostly undergraduate, accounting for 47.7%, and 6.2% of the supervisors had high school education and below, 35.3% held vocational degree, 9% master's degree, and 1.9% doctoral degree and above.

(4) For job position, majority of the positions of the direct supervisors of the respondents were low level managerial members which accounted for 48.9%. The proportion of the middle level managers was 36.7%, while that of the high level was 14.4%.

(5) From the perspective of working years, the number of direct supervisors working for three to five years, accounted for 32.4%. There working less than one year accounted for 5.9%, one to three years 14.2%, five to ten years 28.0% and managers who work over ten years 19.5%.

(6) From the perspective of enterprise type, manufacturing accounted for the largest proportion, which was 84.8%. The service industry accounted for 15.2%.

Table 3.1 Summary of the 646 valid samples' basic information summary

Statistics Items	Category	frequency	Percentage of Total
Gender	Male	425	65.8%
	Female	221	34.2%
Age	Under 30	114	17.6%
	31-40 years old	286	44.3%
	41-50 years old	178	27.6%
	Over 51	68	10.5%
Educational attainment	High school and below	40	6.2%
	Vocational degree	228	35.3%
	Undergraduate	308	47.7%
	Master	58	9.0%
	Doctorate and above	12	1.9%



Statistics Items	Category	frequency	Percentage of Total
Status	Low level managers	316	48.9%
	Middle managers	237	36.7%
	Senior Managers	93	14.4%
Years of work	One year or less	38	5.9%
	One to three years	92	14.2%
	Three to five years	209	32.4%
	Five to ten years	181	28%
	More than ten years	126	19.5%
Enterprise Type	Manufacturing	548	84.8%
	Services	98	15.2%

### 3.3.2 Reliability and validity

Prior to further analysis, constructs' reliability and validity needed to be examined to ensure the quality of the measurement. Reliability refers to the degree to which the results obtained when the same method is used are consistent. Validity refers to the degree to which measurement scales or method can accurately measure the variables, or the degree to which the properties of constructs can be accurately and truly measured (Feng Xiaotian, 2013).

#### (1) Exploratory Factor Analysis (EFA)

Exploratory factor analysis is to test whether all items are theoretically attributed to the same dimension and can clearly form a common factor with the largest extracted variance ratio, so that the connotation of that dimension can be expressed and conceptualized. Examination started with the KMO (Kaiser-Meyer-Olkin) measure and Bartlett's test of sphericity to determine whether the sample is suitable for factor analysis. In general, when the value of KMO is greater than .90, the validity of the items are suitable; .80 to .90 is appropriate; .70 to 0.80 is general; .60 to .70 is barely appropriate; and .50 to .60 is not appropriate. When the value of KMO is less than .50, the measure scale is not accepted. Bartlett's test of sphericity is acceptable as long as it reaches a significant level (Guo Zhigang, 2004). Given that the scale is

valid, the common factor can be performed by principal component analysis and varimax rotation, followed by testing the reliability

## (2) Reliability analysis

In this paper, Cronbach's consistency coefficient (alpha coefficient) was used to analyze reliability. Gay (1992) suggested that the reliability coefficient of any measuring scale would indicate the best reliability if it is above .90. However, for the lowest acceptable reliability coefficient, scholars have different opinions, Devellis (1991) and Nunnally (1978) considered an acceptable minimum reliability of .70. However, Bryman and Cramer (1997) argued the minimum acceptable reliability is .80. In addition to this, most scholars agreed that if the reliability is below .60, it is better to revise the measuring tool (Wu Minglong, 2003).

## **CHAPTER 4**

### **RESULTS AND DISCUSSION**

This chapter exhibits the outcome of statistical analysis on the collected data through the planned research methodology. The first part is the descriptive statistical analysis of items of each latent variable of the survey data; the second part is the common method variance analysis of the data obtained; the third part analyzes the individual factors; the fourth part presents the overall reliability and validity of the measuring scales analysis; the fifth part shows the results of the confirmatory factor analysis; the sixth part describes the final model's path analysis; and the seventh part discusses the empirical research findings.

#### **4.1 Descriptive statistical analysis**

##### **4.1.1 Latent variables of the model of the study**

The model of this study includes eight latent variables that were measured by 48 items in Likert 5-point scale questions (1- Strongly agree, 2- Moderately agree, 3- General, 4- moderately disagree, 5- Strongly disagree). That means the lower the score, the better the respondent agrees with the statement. Statistical results are shown in Table 4.1:

Among them, the mean of communication ability is 2.11, which indicates that the vast majority of employees of mainland Taiwan-funded enterprises tend to recognize the communication ability of their supervisors. The mean of management innovation capability is 2.25, indicating that employees tend to recognize the management innovation capability of their direct supervisors. The mean of commanding resilience was 2.28, indicating that they tend to recognize the commanding resilience of their direct supervisors at work. The mean of personnel integration ability is 2.32, indicating that the employees tend to recognize the personnel integration ability of

their direct supervisors at work. The mean of emotional management ability was 2.37, indicating that employees tend to endorse the emotional management ability of their direct supervisors at work. The mean of charisma is 2.37, indicating that employees of Taiwan-funded enterprises perceive that their direct supervisors are more attractive at work. The value of 2.44 indicates that the organizational factors in Taiwan-funded enterprises has a great influence on the development of enterprises. The cultural factors mean was 3.27, indicate that cultural factors may be overlooked in Taiwan-funded enterprises.

Table 4.1 Summary of each item measure of the core latent variables

	mean	standard deviation
<b>Communication Ability</b>	2.11	.715
<b>Management Capability</b>	2.25	.747
<b>Commanding Resilience</b>	2.28	.706
<b>Personnel Integration</b>	2.32	.725
<b>Emotional Management</b>	2.37	.681
<b>Charisma</b>	2.37	.688
<b>Overall Organizational Factors</b>	2.44	.453
<b>Cultural Factors Overall</b>	3.27	1.043

## 4.2 Common method variance

Common Method Variance refers to the subject feedback in the same setting, which produces a false covariation between the independent variable and the dependent variable. Since errors arising from such covariation relationships might confound the study results, the common method bias testing is required. In this study, Harman's Single Factor Test was used to test the common method variance of the study. An unrotated exploratory factor analysis of the measurement question items for all variables was performed by using SPSS 20 as shown in Table 4.23 (see Appendix). Results show that a total of 15 factors with eigenvalues greater than 1 are formed, and

the first factor explains a total variance of 16.982%, which is less than the critical value of 50%. From this, it can be stated that the common method variance in this study does not affect the final results.

### 4.3 Individual characteristic factors

This section analyzed the differences in the leadership of supervisors of different gender, age, job level, length of work, education level, and business type. The independent sample T test was used to test the differences between two independent groups. For three groups and above, One-Way ANOVA was used (Wu Minglong, 2003). Post-hoc tests were performed by using the Turkey and Dunnett C. If the P value of the single-factor independent sample variation analysis was significant (set  $\alpha = .05$ ), look at the Turkey HSD table; if the P value is not significant, look at the Dunnett C table.

#### (1) Gender differences in supervisor leadership

As shown in table 4.2, the Levene statistic test is  $F=5.689$  and the corresponding level of significance  $P = .017$  significant at  $P<.05$ . Therefore, the assumption of homogeneity was violated and the equal variances not assumed. Table 4.2 shows a significant difference ( $P<.05$ ) in the leadership between male and female managers in mainland Taiwan-funded enterprises. The leadership of female managers was better than that of males in this study.

Table 4.2 Gender difference in the leadership of managers

descriptive statistics					Levene's test		T test
Name	gender	N	mean	standard deviation	F	Sig.	Sig. (bilateral)
Leadership	Male	425	2.43	.507	5.698	.017	.000
	Female	221	2.04	.453			

## (2) Perceived leadership difference of managers by age

Tables 4.3 to 4.5 exhibit the Levene test  $F=1.172$   $P = .320$ . It reveals an insignificant result ( $P>.05$ ). Thus, the post hoc test, Dunnett C table should be used, where the  $P$  value is significant ( $P< .05$ ) which reveals that there is a significant difference in leadership in age groups. Among them, the leadership of supervisors under the age of 30 is significantly different when compared to those of supervisors aged 31-40 and supervisors aged 41-50. For a supervisor over the age of 51, there is no significant difference. The leadership of supervisors aged 31-40 is significantly different from that of supervisors under 30, but not for supervisors aged 41-50 and over 51. The leadership of supervisors aged 31-40 is significantly different from the leadership of supervisors under the age of 30, but it is not true for other ages. The leadership of supervisors over the age of 51 has no significant difference from that of the supervisors of any age group. According to the mean, the leadership of managers aged 41 – 50 years is perceived to be the best in this study.

Table 4.3 Descriptive statistics for age

	<b>N</b>	<b>mean</b>	<b>standard deviation</b>
Under 30	114	2.4354	56294
31-40 years old	286	2.2716	51466
41-50 years old	178	2.2497	49000
Over 51	68	2.2961	53848
Total	646	2.2971	52235

Table 4.4 Tests for homogeneity of variance of age in leadership

<b>Levene statistic</b>	<b>df1</b>	<b>df2</b>	<b>significance</b>
1.172	3	642	<b>320</b>



Table 4.5 Multiple comparisons of age in leadership

Multiple comparisons						
(I)age	(J)age	mean difference (I-J)	standard error	significance	95% confidence interval	
					lower limit	upper limit
Dunnett C	Under 30	<b>31-40 years old</b>	<b>.16379*</b>	<b>.06088</b>	<b>.0054</b>	<b>.3222</b>
		<b>41-50 years old</b>	<b>.18566*</b>	<b>.06425</b>	<b>.0184</b>	<b>.3529</b>
		Over 51	.13928	.08393	-.0809	.3595
	31-40 years old	<b>Under 30</b>	<b>-.16379*</b>	<b>.06088</b>	<b>-.3222</b>	<b>-.0054</b>
		41-50 years old	.02187	.04770	-.1017	.1454
		Over 51	-.02451	.07204	-.2137	.1647
	41-50 years old	<b>Under 30</b>	<b>-.18566*</b>	<b>.06425</b>	<b>-.3529</b>	<b>-.0184</b>
		31-40 years old	-.02187	.04770	-.1454	.1017
		Over 51	-.04638	.07492	-.2430	.1503
	Over 51	Under 30	-.13928	.08393	-.3595	.0809
		31-40 years old	.02451	.07204	-.1647	.2137
		41-50 years old	.04638	.07492	-.1503	.2430

(\*The significant level of the mean difference was .05.)

### (3) Level of education in the leadership of managers

Concerning educational level, the Levene test indicates that  $F=5.104$   $P=.003$  significant at  $P<.01$  as shown in Tables 4.24 to 4.26 (see Appendix). Thus, the Tukey HSD comparison was used to explain the differences in the leadership of the managers in different educational levels. As the P value is significant, therefore, the education level of managers has a significant difference in their leadership. The leadership of supervisors who had high school education and below was significantly different from that of undergraduates, master degree, and doctoral degree holders and above except that of the vocational degree holders. There is a significant difference between the supervisor leadership of a vocational degree holder and bachelor's degree, master's degree, doctoral degree or above holder. The leadership of a bachelor's

degree is significantly different from that of a manager with a holder senior high school educational and below level, on a vocational degree, master's degree, doctoral degree or above. The supervisor leadership of a master's degree holder is significantly different from that of a manager with a high school educational level and below, on that of a vocational degree holder, and undergraduate, but there is no significant difference from that of a doctoral degree holder or above. The supervisor leadership of a doctoral degree holder or above has a significant difference among all educational levels except that of the master's degree holder.

Based on the results of the study, in general, the higher the level of education of managers, the stronger their leadership.

#### **(4) The job level and leadership of managers**

As for job level, the Levene test indicates that  $F=6.307$   $P=.002$  significant at  $P<.01$  as shown in Tables 4.27, 4.28 and 4.29 (see Appendix). Thus, the Tukey HSD comparison was used to explain the differences in the leadership of the managers in different educational levels. As the P value is significant, therefore, the job level of managers has a significant difference in their leadership. Among them, the leadership of junior managers has a significant differences compared with the leadership of senior managers, and there is no leadership difference compared with that of the middle-level managers. The leadership of middle managers is significantly different from that of senior managers. In the study, the position level of managers had a clear influence on their leadership, and the higher the in position was, the stronger their leadership.

#### **(5) Working years and the leadership of managers**

As for working years, the Levene test indicates that  $F=3.628$   $P=.006$  significant at  $P<.01$  as shown in Tables 4.30 to 4.32 (see Appendix). Thus, the Tukey HSD comparison was used to explain the differences in the leadership of the managers in different working years. As the P value is significant, therefore, the working years of managers has significant difference in their leadership. The significant differences in supervisor leadership can only be found between there who have worked for less than one year and there for more than ten years; and, leadership of supervisors who have

worked for one to three years is also significantly different from the leadership of supervisors who have worked for more than ten years. There is no significant difference in the supervisor leadership between other years of working groups.

In study, the managers who worked longer had stronger leadership.

#### (6) Type of enterprise and the leadership of managers

Table 4.6 exhibits the result of independent sample T test. According to Levene test, the  $P = .847$  the  $F = .037$ , the result is insignificant ( $P > .05$ ), the two-tailed  $P = .017$ , reveals that different types of companies have significant differences in the leadership of managers. In the study, service firms exhibit stronger manager leadership.

Table 4.6 Type of enterprise and the leadership of managers

descriptive statistics					Levene's test		T test
Name	Enterprise Type	N	mean	standard deviation	F	Sig.	Sig. (bilateral)
Leadership	Manufacturing	548	2.32	.523	.037	.847	.017
	Services	98	2.18	.501			

#### 4.4 Validity and reliability analysis

During the model construction in this study, the item measures of latent variables had adapted scales in previous studies. However, an exploratory factor analysis (EFA) was used before carrying out the reliability test. The KMO test and Bartlett's test of sphericity of the samples are first required to measure sampling appropriateness, and the larger the value of KMO, and the more common factors among variables are represented, the more appropriate it is for factor analysis (Wu Minglong, 2003). When the KMO value is greater than .9, it means it is very suitable for factor analysis; when KMO value is between .8-.9, it means it is suitable for factor analysis; when KMO value is between .6-.7, it means barely suitable for factor analysis; when KMO value is between .5-.6, it means it is not suitable for factor analysis; when the KMO is less than .5, it means it is not suitable for factor analysis at all. (Wu Minglong, 2010).

Thus, according to Wu Minglong (2003), an exploratory factor analysis needs a KMO value greater than .5.

Table 4.7 shows the reliability and validity results summary. The table shows that the combined KMO values of this study is .887. The overall Bartlett's sphericity test has a chi-square value of 6932.904, and the degree of freedom is 1128, both of which are significant, which also indicates suitability for exploratory factor analysis.

Exploratory factor analysis procedures were next carried out for each construct as shown in Table 4.7 which includes the KMO value of .670 for communication ability and 334.202 for Bartlett's sphericity test; and the sample was barely suitable for factor analysis. All factor loadings of the three questions exceeded .7, clearly forming a common factor. The KMO value of Management Innovation Ability is .644, and Bartlett's sphericity test value is 302.213. The sample is also barely suitable for factor analysis. All factor loadings of the three questions exceeded .7, clearly forming a common factor. The KMO value of the command strain ability is .564, and Bartlett's sphericity test value is 182.479. The sample is barely suitable for factor analysis. All factor loadings of the three questions exceeded .6, clearly forming a common factor. The KMO value of personnel integration ability is .671, and the Bartlett's sphericity test value is 248.515. The sample is barely suitable for factor analysis. All factor loadings of the four questions exceeded .6, clearly forming a common factor. The KMO value for emotional management ability was .616, and Bartlett's sphericity test was 282.137. The sample was barely suitable for factor analysis. All factor loadings of the four questions exceeded .6, clearly forming a common factor. The KMO value of charisma factor is .661, and the Bartlett's sphericity test value is 338.848. The sample is barely suitable for factor analysis. All factor loadings of the five questions exceeded .5, clearly forming a common factor. The KMO value of the organization factor is .835, and the Bartlett's sphericity test value is 2457.504. The sample is suitable for factor analysis and clearly forms four common factors. The KMO value of the cultural factor is .500, and the Bartlett's sphericity test value is 62.184. The sample is barely suitable for factor analysis.

Table 4.7 Reliability and validity analysis summary table

Variables	KMO	Barlett	Sig.	Cronbach
LCOM	.670	334.202	.000	.698
LMI	.644	302.213	.000	.671
LCR	.564	182.479	.000	.553
LHR	.671	248.515	.000	.595
LEM	.616	282.137	.000	.600
LCHR	.661	338.848	.000	.575
OHS	.707	613.461	.000	.672
ODA	.701	341.033	.000	.591
OOF	.662	359.781	.000	.610
OPS	.660	252.181	.000	.598
Culture	.500	62.184	.000	.293
Combined	.887	6932.904	.000	.887

(Note: LCOM denotes "communication ability", LMI denotes "management innovation capability", LCR denotes "command response ability", LHR denotes "personnel integration ability", LEM denotes "emotional management ability", LCHR denotes "charm", OHS denotes "internal interpersonal support" in organizational factors, OOF denotes "organizational adaptation" in organizational factors, ODA denotes "growth opportunity" in organizational factors, and OPS denotes "procedural rules" in organizational factors.)

In order to further understand the reliability of the measuring scales, a reliability test is needed. The reliability test method commonly used is the Cronbach's alpha coefficient. If the reliability of a scale is higher, it means that the scale is more consistent in representing the construct (Stability).

There are two categories of reliability: external reliability and internal reliability. External reliability refers to the degree of scale consistency when measured at different times, and test-retest reliability is the most commonly used test method for external reliability. In the multiple item scales, internal reliability is very important. Internal reliability refers to whether each scale measures a single concept, and at the same time, the degree of internal consistency of the items that make up the scale. If the intrinsic reliability alpha coefficient is above .80 (Bryman, Cramer, 1997), it indicates that the scale has high reliability. The intrinsic reliability alpha coefficient



for each construct level after factor analysis will generally be lower than the reliability of the total scale. The most commonly used method for measuring intrinsic reliability is the Cronbach's alpha coefficient (Wu Minglong, 2003). Therefore, this study used Cronbach's alpha coefficient to test the reliability of the internal consistency of the questionnaire.

Gay (1992) states that the reliability coefficient of any test or scale indicates the best reliability if it is above .90. However, concerning the acceptable minimum reliability coefficient, the views of different scholars vary, DeVellis (1991) Nunnally (1978) The minimum acceptable reliability value is .70; Bryman & Cramer (1997) The lowest acceptable reliability value is .80. The reliability coefficient of the total scale is preferably above 0.8, and it is acceptable between .7-.8; the reliability coefficient of the subscale is preferably above .7, and .6-.7 is also acceptable. The Cronbach's  $\alpha$  coefficient needs to be recoded if it is below .6 (Wu Minglong, 2003). According to Li (1951), Cronbach's  $\alpha$  coefficient which is above .7, indicates high reliability. When Cronbach's  $\alpha$  coefficient is between .35 and .70, it shows low reliability.

As shown in Table 4.7, the results of the reliability validity analysis of the combined Cronbach's  $\alpha$  coefficient was .887, and the Cronbach's  $\alpha$  coefficient based on the standardized term was .900. Therefore, the overall reliability of this study is good. Among them, the Cronbach's  $\alpha$  coefficient of communication ability is .698 and the reliability is acceptable. The Cronbach's  $\alpha$  coefficient of management innovation capability is .671, and the reliability is acceptable. The Cronbach's  $\alpha$  coefficient of command strain ability is .553, and the reliability is slightly lower, but it is still acceptable. The result of the reliability analysis of personnel integration ability shows that the Cronbach's  $\alpha$  coefficient is .595, and the reliability is slightly lower, but it is still acceptable. Emotion management ability had a Cronbach's alpha coefficient of .600 and acceptable reliability. The Cronbach's  $\alpha$  coefficient for charisma is .575, and the Cronbach's  $\alpha$  coefficient based on the standardized term is .608 with slightly lower reliability but is still acceptable. The Cronbach's  $\alpha$  coefficient of the organizational factor is .819, and the Cronbach's  $\alpha$  coefficient based on the standardized term is .820 with good reliability. The Cronbach's  $\alpha$  coefficient of cultural factors is .293, and the Cronbach's  $\alpha$  coefficient based on standardized terms



is .297. The reliability is very low and cannot be accepted. The item measure was reviewed and adjusted.

#### **4.5 Confirmatory Factor Analysis (CFA)**

The full SEM model incorporates both the measurement model and the structural model. Whether the measurement model can reflect the proposed facets of the study needs to be analyzed before evaluating the structural model. This study used AMOS 23 for confirmatory factor analysis (CFA). The confirmatory factor model included the first-order CFA model and the second-order CFA model. CFA can evaluate validity, reliability, and so on. between the measured index variables and the latent component. Validity also includes convergent validity, discriminant validity, rule validity, and face validity (Wu Minglong, 2013). The second-order CFA model is a measurement model extended by the first-order CFA model. A model fitness test is required prior to performing a CFA test. The model fitness test is to test the hypothesis model (Estimates of structured population) and derived covariance matrix with sample data (Estimates of the unstructured population). If the degree of difference between the resulting covariance matrices is small, it indicates that the model is appropriate and is assumed to fit the sample data (Wu Minglong, 2009). In the CFA test, Composite reliability (CR) refers to the combination of the reliability of all measured variable terms, which indicates the internal consistency of the facet index. If the CR value is high, it indicates the internal consistency of the facet is high. Fornell and Larcker (1981) suggested CR values above .6. Average of variation extracted (AVE) refers to the explanatory power of the number of variations in the measurement of the underlying variable. If the AVE is higher, it means high reliability and convergent validity of the configuration. Ideally an AVE must be greater than .5, but Fornell and Larcker (1981) considered .36 – .5 as an acceptable threshold. In Dong Fangfang's (2007) study, women's leadership and organizational factors were used as observation variables, but in this study, the observation variable was changed into a latent variable, which further enriched its information connotation. Therefore, this study needed a second-order factor analysis. According to Doll, Xia and Torkzadeh (1994) the method of confirmatory factor analysis orders are, firstly an

analysis of first-order factor analysis, first-order multi-factor non-correlation analysis, first-order multi-factor correlation analysis, second-order factor analysis, and then an observation of their target coefficients, that is, the first-order factor has a related chi-square value/second-order model chi-square value, and the closer the target coefficient is to 1, the more representative the second-order model could show that the second-order model was better than the first-order model at a target coefficient of .74 . With regard to this study, when the target coefficient value was greater than .74, it could also reveal that the second-order model of this study was better than the first-order model. Next, using to the second-order factor model analysis method, the second-order model analysis of organizational factors and leadership was conducted separately.

#### **4.5.1 Organizational factors**

The measurement model of organizational factors is shown in Figure 4.1. The results of the model fitness test on organizational factors show that the measurement model can be identified and the non-standardized estimates do not produce negative error term variance. However, the overall fitness index of the organization factor is not good, indicating that the measurement model of the organization factor needs modification.

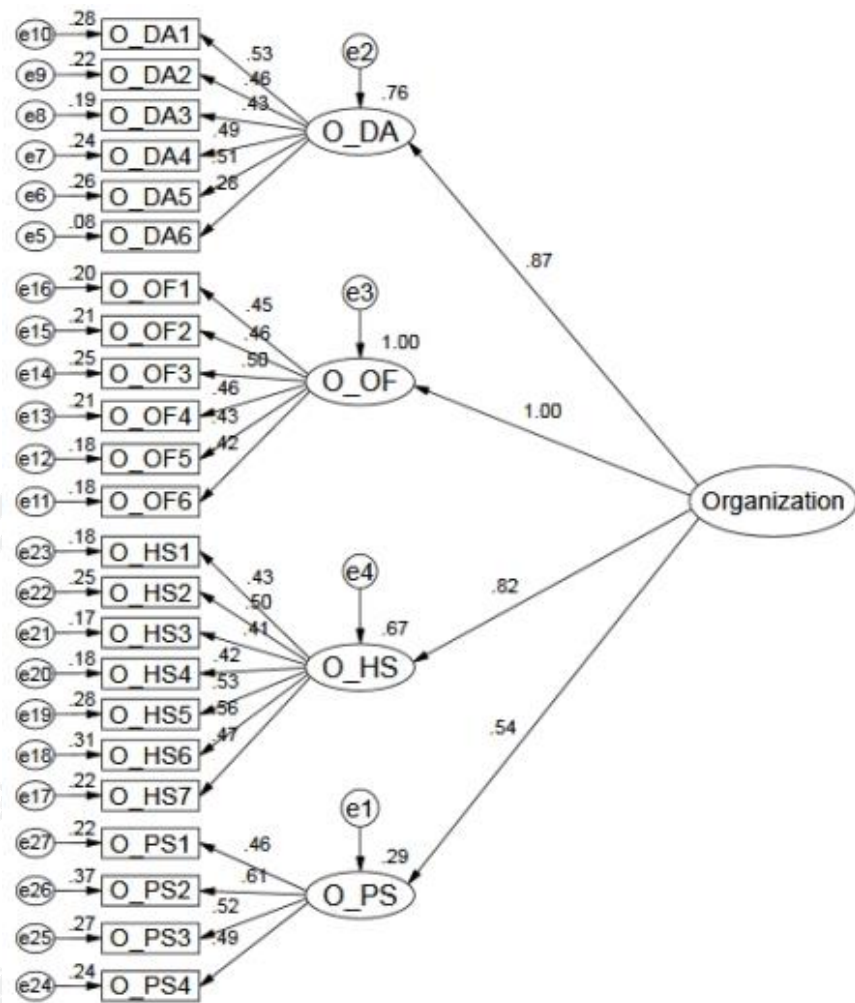


Figure 4.1 "Organizational factor "measurement model (standardized estimate)

(Note: OHS denotes "internal interpersonal support" in organizational factors, OOF denotes "organizational adaptation" in organizational factors, ODA denotes "growth opportunity" in organizational factors, and OPS denotes "procedural rules" in organizational factors.)

Based on the modification indices in Table 4.8, the organizational factors show that the residual of internal interpersonal support OHS3 has a high degree of similarity with OHS4, and the factor load of OHS3 is the lowest, and it cannot effectively reflect the information of the construct to be measured. Thus, OHS3 was deleted. Likewise, ODA3, ODA6, OOF1, OOF5, OOF6, OHS1, and OHS4 were also considered for deletion.

Table 4.8 Summary of modification indices for organizational factors

	<b>M.I.</b>	<b>Par Change</b>
e20 -- e21	132.464	.482
e13 -- e15	20.145	-.144
e12 -- e4	22.101	-.079
e11 -- e23	25.425	.167
e5 -- e1	21.792	.114

After removing the above mentioned items, the model fit as shown in Table 4.9. The results of CFA analysis of organizational factors are shown in Table 4.10. The CR value of the organizational factor was .882 and the AVE was .659; they all met the requirements.

Table 4.9 Organizational factors before and after the deletion of the question item

	<b>X<sup>2</sup></b>	<b>DF</b>	<b>X<sup>2</sup>/DF</b>	<b>GFI</b>	<b>AGFI</b>	<b>RMSEA</b>
Before deletion	658.627	226	2.914	.921	.904	.054
After deletion	185.690	86	2.159	.963	.949	.042

Table 4.10 Organizational factors CFA analysis results

<b>facet</b>	<b>Indicators</b>	<b>Model parameter estimates</b>				<b>convergent validity</b>		
		<b>Un-estimate</b>	<b>S.E.</b>	<b>C.R.</b>	<b>P</b>	<b>Estimate</b>	<b>C.R.</b>	<b>AVE</b>
<b>organizational factor</b>	ODA	1				.780	.882	.659
	OOF	.948	.142	6.684	***	.934		
	OHS	1.092	.153	7.151	***	.906		
	OPS	.709	.114	6.206	***	.579		

Based on the second-order analysis method of Doll, Xia and Torkzadeh (1994), the first and second-order analysis of organizational factors were combined and shown in Figures 4.2 to 4.5. The study's second-order analysis of organizational factors coefficients results were closer to 1. This reveals that the second-order model is superior to the first-order model of organizational factors. The validated model fit metrics and the results are shown in Table 4.11. The second-order analysis of organizational factors yielded a target coefficient of .872.

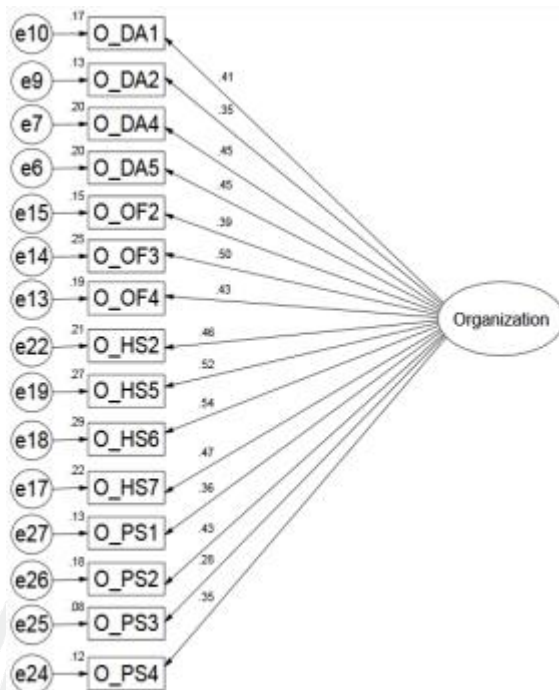


Figure 4.2 First-order single factor analysis model of organizational factors

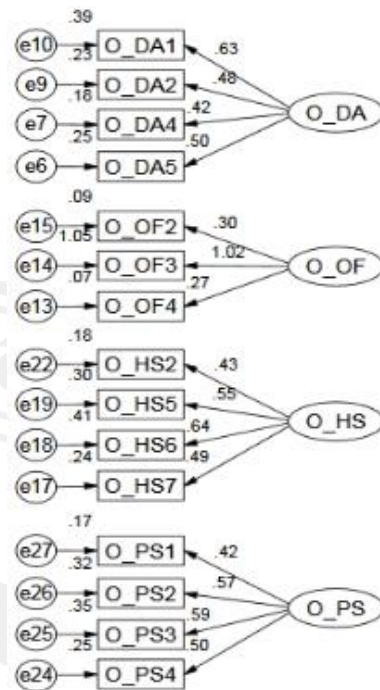


Figure 4.3 Four-dimension models of first order organizational factors

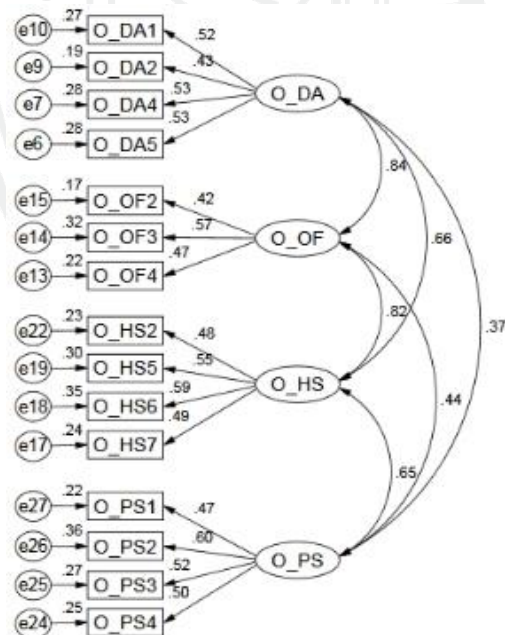


Figure 4.4 Organizational factors in four dimensions with covariance lines

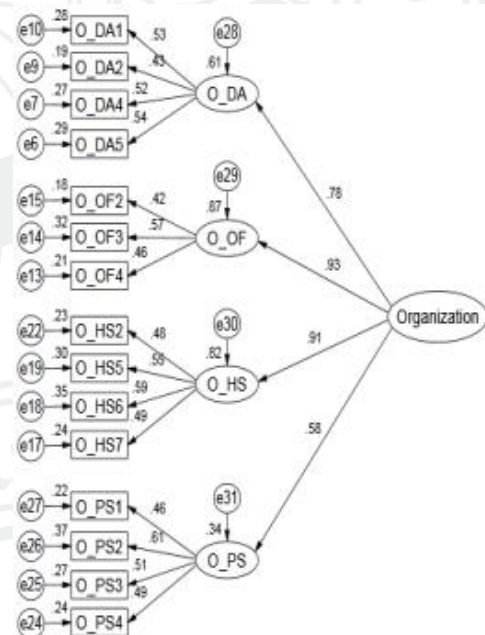


Figure 4.5 Organizational factor in second-order factor model



Table 4.11 Model fit index of organizational factor first and second order comparison

<b>Organizational factor second-order verification factor model</b>	<b>X<sup>2</sup></b>	<b>DF</b>	<b>X<sup>2</sup>/DF</b>	<b>GFI</b>	<b>AGFI</b>	<b>RMSEA</b>
<b>first-order single factor analysis</b>	342.000	90	3.800	.927	.902	.066
<b>First-order four-factor analysis (no correlation between factors)</b>	578.254	90	6.425	.879	.838	.092
<b>First-order four-factor analysis (correlation between factors)</b>	161.846	84	1.927	.968	.954	.038
<b>second-order factor model</b>	185.690	86	2.159	.963	.949	.042
<b>target coefficient</b>	.872					
<b>empirical criterion</b>	Close to 1	The bigger the better	<5	>.8	>.8	<.08

#### 4.5.2 Leadership

The first and second-order analysis of organizational factors were combined and shown in Figure 4.6 to 4.9. The study's second-order analysis of organizational factors coefficients was closer to 1. It shows that the second-order model is superior to the first-order model of organizational factors. The validated model fit metrics are shown in Table 4.12. The second-order analysis of organizational factors yielded a target coefficient of .876.



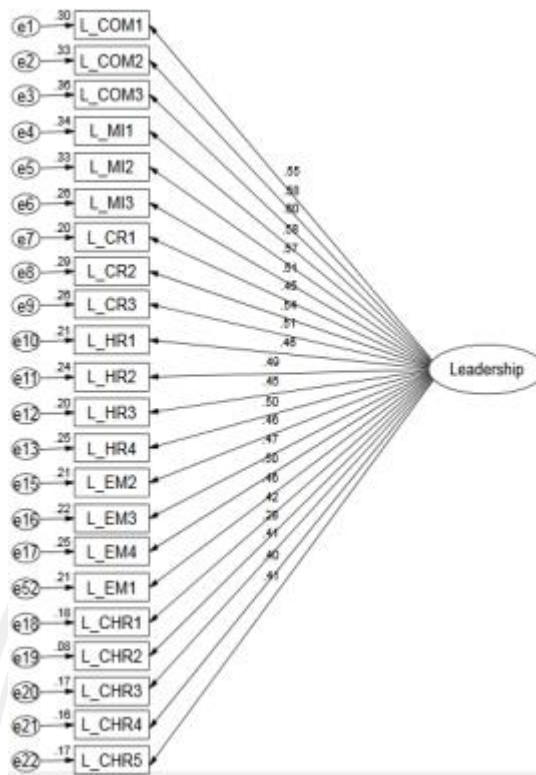


Figure 4.6 First-order single factor analysis model of leadership

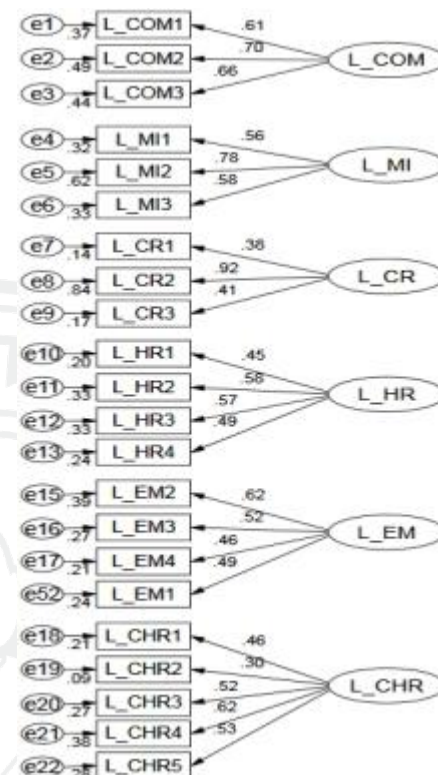


Figure 4.7 First-order six-factor model of leadership

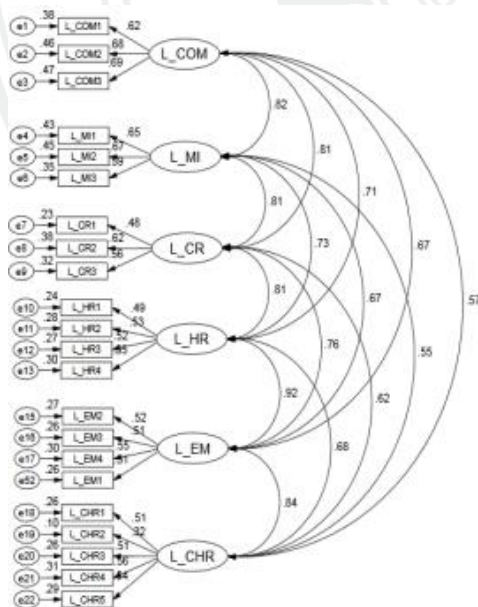


Figure 4.8 First-order multi-factor analysis (correlation between factors) of leadership

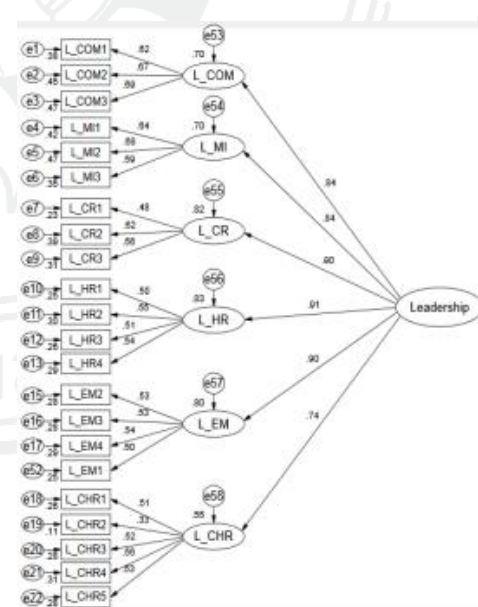


Figure 4.9 Leadership in second-order factor model

Table 4.12 Model fit index of leadership first and second order comparison

Leadership second order validation factor model	$\chi^2$	DF	$\chi^2/DF$	GFI	AGFI	RMSEA
first-order factor analysis	786.245	209	3.762	.895	.739	.065
First-order multifactor analysis (no correlation between factors)	1770.891	209	8.473	.739	.684	.108
First-order multi-factor analysis (correlation between factors)	507.532	194	2.616	.935	.916	.050
second-order factor model	579.257	203	2.853	.926	.907	.054
Target coefficient	.876					
Empirical criterion	Close to 1	The bigger the better	5	.8	.8	.08

The measurement model of leadership shown in Figure 4.10 is the finalized CFA model. Table 4.13 exhibits the model fitness summary. The results of the model fit for leadership show that the measurement model can establish that the unstandardized estimates have no negative variance among residuals. The results of the CFA analysis of leadership are shown in Table 4.14. The CR value of leadership is .939, and the AVE is .720, both are in line with the criterion.

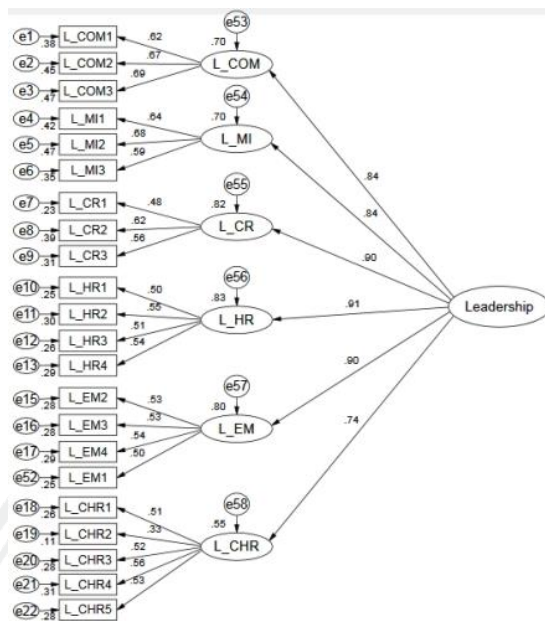


Figure 4.10 Leadership measurement model

(Note: LCOM denotes "communication ability", LMI denotes "management innovation capability", LCR denotes "command response ability", LHR denotes "personnel integration ability", LEM denotes "emotional management ability", LCHR denotes "charm")

Table 4.13 Leadership model fit summary table

Statistical Test Item	Model fit standard or criterion	Test results	Model fit judgment
Chi-square $X^2$	— — —	579.257	
DF	— — —	203	
$X^2/DF$	$\leq 3$	2.853	Fit
GFI	$\geq .8$	.926	Good fit
AGFI	$\geq .8$	.907	Good fit
RMSEA	.08	.054	Good fit

Table 4.14 Leadership CFA analysis results

construct	Indicators	Model parameter estimates				Convergent validity		
		Unstandardized	S.E.	C.R.	P	Estimate	C.R.	AVE
Leadership	LCOM	1				.853		
	LMI	1.162	.109	10.693	***	.856		
	LCR	.938	.105	8.938	***	.905		
	LHR	.961	.105	9.187	***	.887	.939	.720
	LEM	.933	.106	8.823	***	.848		
	LCHR	.768	.092	8.384	***	.731		

### 4.5.3 Cultural factors

The measurement model of cultural factors is shown in Figure 4.11. A summary table of the fitness of cultural factors is shown in Table 4.15. As shown, the overall fitness is poor. The regression weight of cultural factors in Table 4.16 exhibits that three item-measures in the cultural factors are insignificant. Due to the wide range of scale CB\_1 and the lack of strong purpose in the questionnaire survey, only CB1 was considered for retention. After deletion, cultural factors were transformed from latent variables to observed variables.

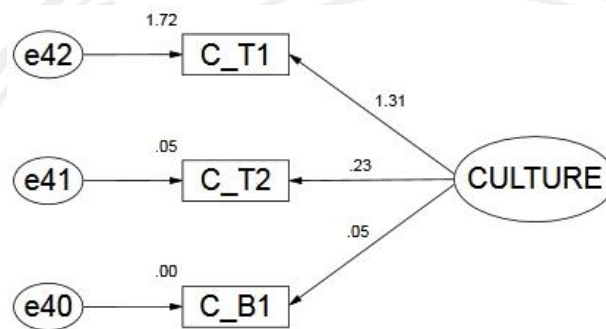


Figure 4.11 Initial cultural factors measurement model

Table 4.15 Cultural factors model fitness summary table

Statistical Test Item	Adaptation standard or critical value	Test results	Adaptation judgment
Chi-square $X^2$	— — —	.000	
DF	— — —	0	
$X^2/DF$	$\leq 3$	— — —	maladaptive
GFI	$\geq .95$	1.000	adaptation
AGFI	$\geq .95$	— — —	maladaptive
RMSEA	.08	.175	maladaptive

Table 4.16 Cultural factors regression analysis table

	Estimate	S.E.	C.R.	P
CT2 ---CULTURE	.321	1.144	.281	.779
CT1 ---CULTURE	1.000			
CB1 ---CULTURE	.029	.107	.271	.787

#### 4.6 Model path analysis

Based on the conceptual framework constructed and the measurement model discussion in the previous section, path model was constructed to test the hypotheses. Figure 4.12 indicates the path relationship of organizational factors to leadership. Table 4.17. reveals that the combined organizational factors have a significant impact on leadership.

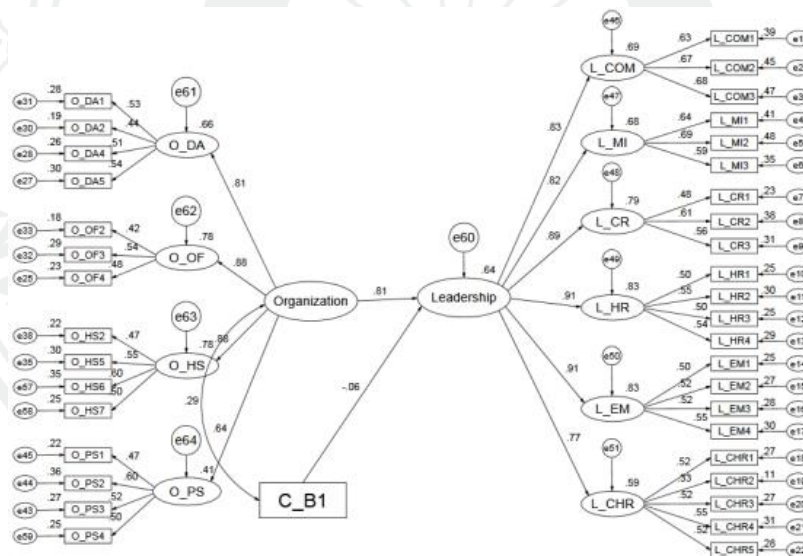


Figure 4.12 Organizational factors pathway analysis of leadership

(Note: LCOM denotes "communication ability", LMI denotes "management innovation capability", LCR denotes "command response ability", LHR denotes "personnel integration ability", LEM denotes "emotional management ability", LCHR denotes "charm", OHS denotes "internal interpersonal support" in organizational factors, OOF denotes "organizational adaptation" in organizational factors, ODA denotes "growth opportunity" in organizational factors, and OPS denotes "procedural rules" in organizational factors.)



Table 4.17 Relationship of organizational factors to leadership

Path relationship	Standardized regression weight	S.E.	CR	P	Significance
Organization-- Leadership	.813	.106	8.155	***	significant

The path relationship between growth opportunity and leadership in organizational factors is shown in Figure 4.13 and in Table 4.18. It shows that the growth opportunity in the organizational factors has a positive impact on leadership.

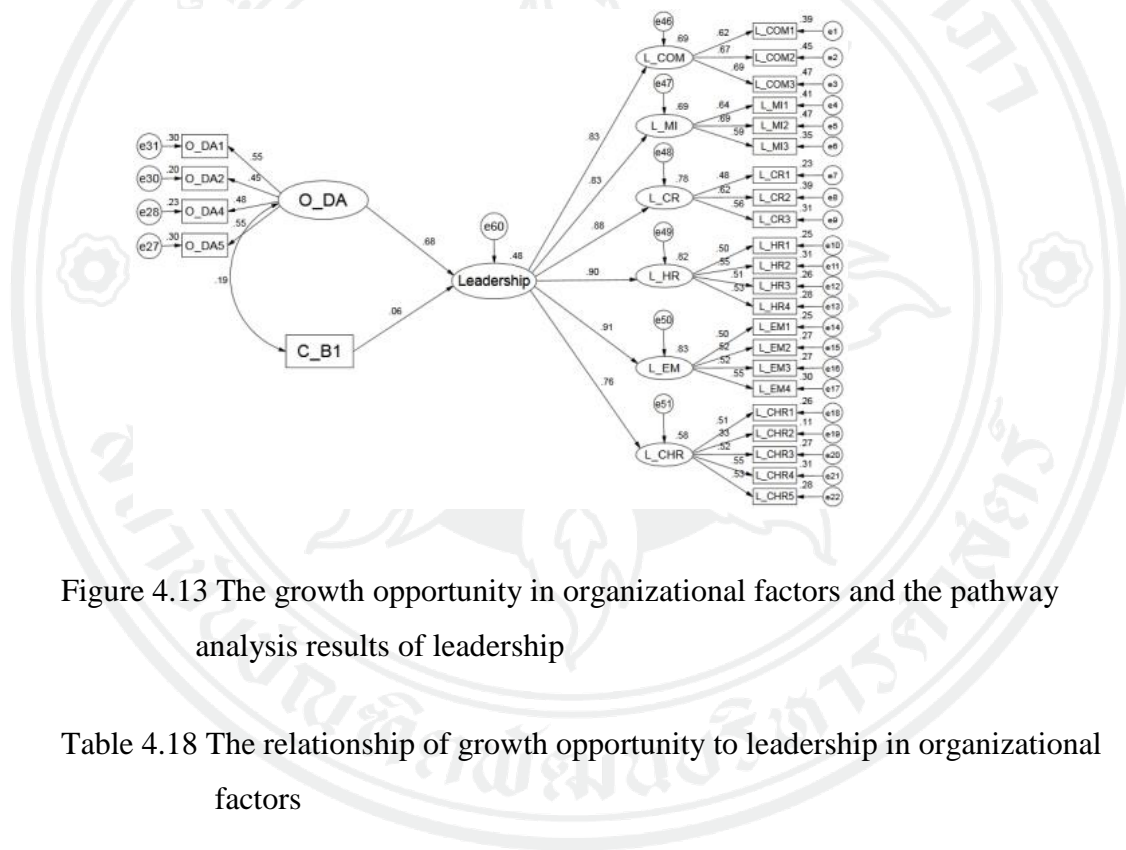


Figure 4.13 The growth opportunity in organizational factors and the pathway analysis results of leadership

Table 4.18 The relationship of growth opportunity to leadership in organizational factors

Path relationship	Standardized regression weight	S.E.	CR	P	Significance
O_DA--- Leadership	.677	.073	7.735	***	significant

The relationship between interpersonal support and leadership is shown in Figure 4.14. Table 4.19. reveals that the interpersonal support dimension in the organizational factors has an impact on leadership.



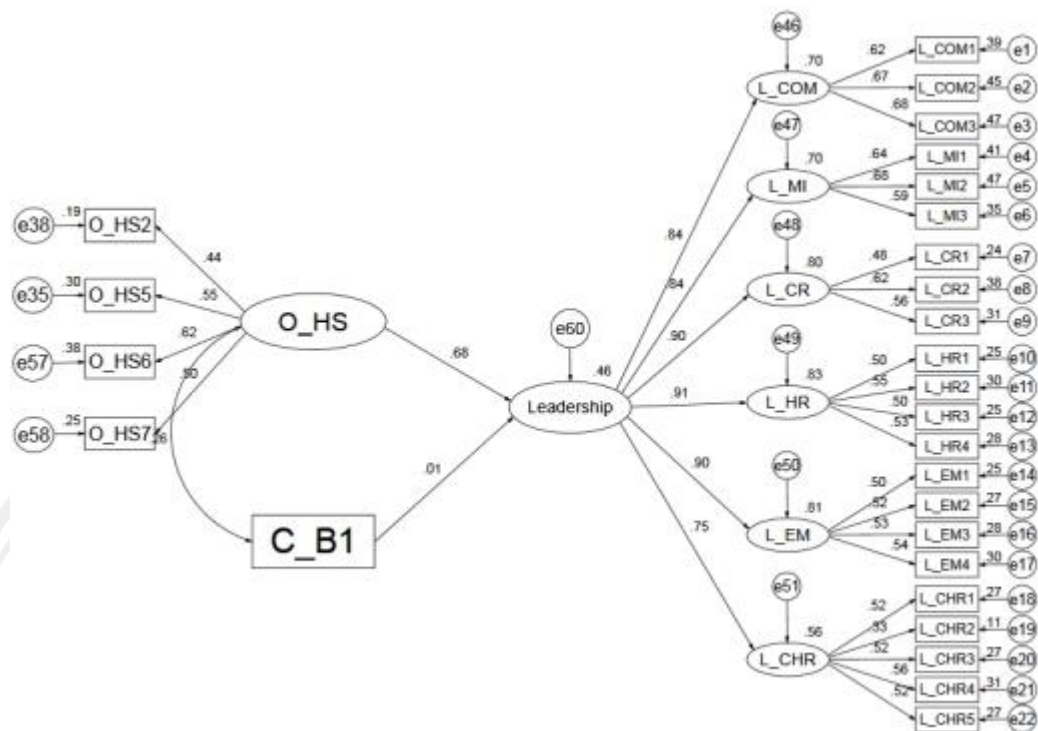


Figure 4.14 Interpersonal support in organizational factors and leadership

(Note: LCOM denotes "communication ability", LMI denotes "management innovation capability", LCR denotes "command response ability", LHR denotes "personnel integration ability", LEM denotes "emotional management ability", LCHR denotes "charm", OHS denotes "internal interpersonal support" in organizational factors, OOF denotes "organizational adaptation" in organizational factors, ODA denotes "growth opportunity" in organizational factors, and OPS denotes "procedural rules" in organizational factors.)

Table 4.19 The relationship of internal interpersonal support to leadership

Path relationship	Standardized regression weight	S.E.	CR	P	Significance
O_HS--- Leadership	.675	.070	7.920	***	significant

The relationship between person-organizational fit and leadership is shown in Figure 4.15. Table 4.20 shows that it is significant to conclude that organizational adaptation in organizational factors has positive and significant impact on leadership.

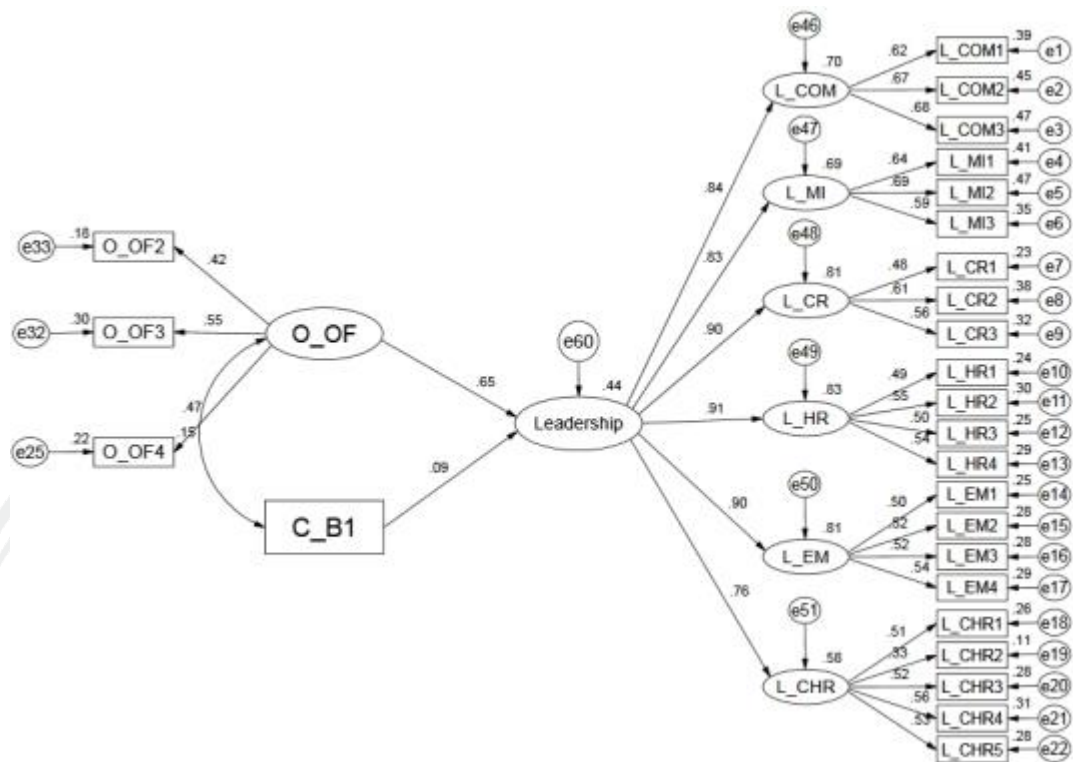


Figure 4.15 Person organizational fit in organizational factors and leadership

(Note: LCOM denotes "communication ability", LMI denotes "management innovation capability", LCR denotes "command response ability", LHR denotes "personnel integration ability", LEM denotes "emotional management ability", LCHR denotes "charm", OHS denotes "internal interpersonal support" in organizational factors, OOF denotes "organizational adaptation" in organizational factors, ODA denotes "growth opportunity" in organizational factors, and OPS denotes "procedural rules" in organizational factors.)

Table 4.20 The relationship of person-organizational fit to leadership

Path relationship	Standardized regression weight	S.E.	CR	P	Significance
O_OF--- Leadership	.648	.117	6.064	***	significant

For the rule and procedure, the path model of its relationship with the leadership is shown in Figure 4.16. Table 4.21 reports that, it is after to conclude that the procedural rules in the organizational factors have little effect on leadership.

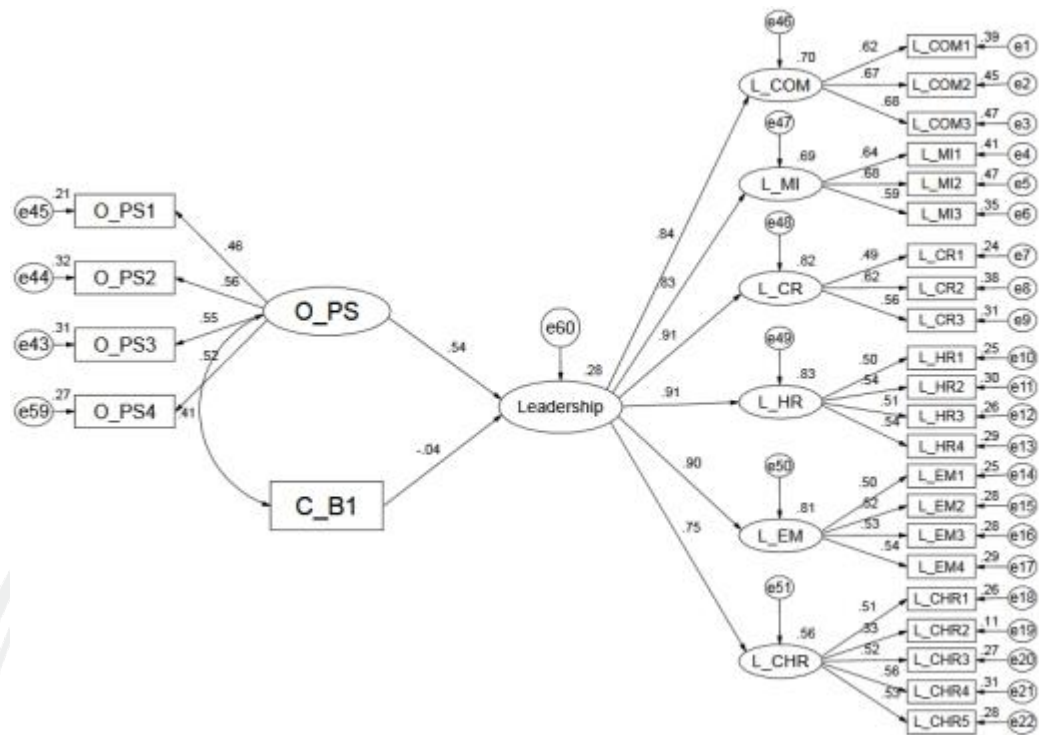


Figure 4.16 The rules and procedure in organizational factors and the results of path analysis of leadership

(Note: LCOM denotes "communication ability", LMI denotes "management innovation capability", LCR denotes "command response ability", LHR denotes "personnel integration ability", LEM denotes "emotional management ability", LCHR denotes "charm", OHS denotes "internal interpersonal support" in organizational factors, OOF denotes "organizational adaptation" in organizational factors, ODA denotes "growth opportunity" in organizational factors, and OPS denotes "procedural rules" in organizational factors.)

Table 4.21 The relationship of rules and procedures with leadership

Path relationship	Standardized regression weight	S.E.	CR	P	Significance
OPS--- Leadership	.543	.066	6.591	***	significant

The path model of cultural factors to leadership is shown in Figure 4.17. Table 4.22 shows the result that the impact of cultural factor leadership is insignificant  $p = .149 > .05$

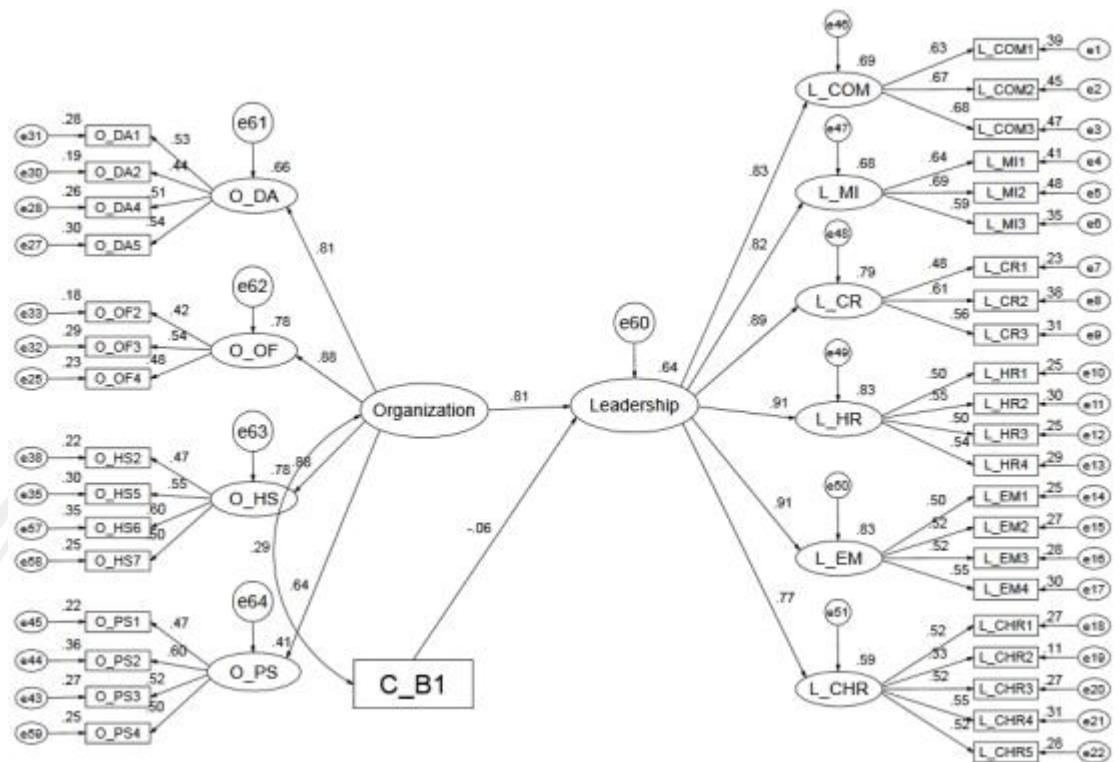


Figure 4.17 The pathway relationship between cultural factors and leadership

(Note: LCOM denotes "communication ability", LMI denotes "management innovation capability", LCR denotes "command response ability", LHR denotes "personnel integration ability", LEM denotes "emotional management ability", LCHR denotes "charm", OHS denotes "internal interpersonal support" in organizational factors, OOF denotes "organizational adaptation" in organizational factors, ODA denotes "growth opportunity" in organizational factors, and OPS denotes "procedural rules" in organizational factors.)

Table 4.22 Cultural factors and leadership

Path relationship	Standardized regression weight	S.E.	CR	P	Significance
CB1--- Leadership	-.056	.017	-1.442	.149	insignificant

## **4.7 Discussion on the research results**

This study investigated the influencing factors of female supervisor leadership in Taiwan-funded enterprises in mainland China in the form of a questionnaire that was distributed in Huai'an City, Jiangsu Province. The factors are discussed from three aspects: key demographic factors, organizational factors and cultural factor.

### **4.7.1 Personal factors on leadership**

Through the analysis of the personal factors by the independent sample T-test and ANOVA, it is known that from the personal factors, the level of leadership depends on gender, age, fairness in the organization, ability to communicate, good at encourage people, good at exerting authority subordinates, emotion control, making personnel arrangements, having charisma and other factors. Barrett (2006) argued that all effective communication depends more on personal skills. Specifically, in terms of gender, male managers and female managers differ in leadership style, and the difference is significant. In terms of specific behavior, women are inclusive, good at cultivating subordinates, willing to help people, shown empathy and consistency in behavior, are more delicate and more democratic. At the same time, it should also be noted that with the progress of social development, enterprises can basically follow the principle of suitability in terms of employment, and there is no obvious differential treatment due to gender differences, reflecting a certain degree of equality between men and women in the organization.

The difference in the age of the supervisors also has a significant effect on their leadership performance. Whether it is men or women, at a younger age, dealing with problems, judging the direction of development, and the identifying trends are difficult due to lack of references. The decisions they make are thus prone to errors. The one who has the experience and has dealt with problems will tend to have self-protection consciousness. The decision will be more rigid and thus lead to a better consequence. In the present study, supervisors in the age group of 41 to 50 years had a stronger leadership than those in other age groups (30 years old, 31-40 years old, 51 years old or older). Chen Youyong's (2016) also supported this argument. Supervisors



of this age generally have a long working time and have their its own mature system in terms of management and leadership.

Education is also an important influencing factor in leadership. Theory is the precursor to practice. It effectively draws lessons from predecessors and avoids weaknesses. This study found that academic qualification has a significant impact on leadership. In this study, most of the supervisors are undergraduate. The level of education of a supervisor directly exerted an effect on leadership. The higher the level of education of supervisor, the faster they can accept novel leadership models. The higher the level of education, the stronger the leadership. This is also exhibited in female supervisors. Lack of experience hinder capability in dealing with certain problems. This is consistent with Qian Yaling (2009) who argued that a qualified supervisor needs creative thinking. If a supervisor wants to further develop in the enterprise, continuous learning and innovation are inevitable. Education is also beneficial to enterprises' and individuals' long-term development.

The length of the managers' service period has a significant impact on the development of their leadership. From the perspective of their service period alone, women managers who have worked for more than ten years have the most management experience (Dong Fangfang, 2007). In this study there are significant differences in leadership among female supervisors of different working years. The longer managers work in management positions, the better their leadership will naturally be over other managers.

The level of managers' positions has a significant impact on their leadership. The higher the position, the better the leadership of the managers. Taiwan-funded enterprises build factories in mainland China mainly in manufacturing and service industries. This study selected these two types of companies for investigation and found that different types of companies have different impacts on their managers' leadership and it was found that service industry managers have better perceived leadership performance.

#### **4.7.2 Organizational factors on leadership**

Through the path analysis of the influence of organizational factors on leadership, it can be seen that there are significant positive correlations between internal



interpersonal support, growth opportunities, rules and procedures, and person-organizational fit of organizational factors and leadership. Therefore, it can be argued that there is a significant positive correlation between organizational factors and the supervisor's leadership performance.

At present, the management of Taiwan-funded enterprises in mainland China is relatively rigorous. The scale of enterprise organization and the positions that companies can provide for female supervisors, the opportunity for growth or promotion for female supervisors are available in the company and the influence to the leadership of female supervisors is significant. That is consistent with the findings of Yuan Xiaowen (2013). She argued that in an enterprise, especially Taiwan-funded enterprises, a set of good organizational rules can effectively help the female supervisors, and prevent unfair treatment and development obstacles that may be encountered in the working place. It can effectively help female supervisors quickly enhance their leadership. A democratic and open management style makes it easier for every employee to actively participate in management.

Meanwhile, Dong Fangfang (2007), stressed that an excellent supervisor must have excellent organizational adaptability or fit well in a company, and will not be divided due to the diversification of the company. Person-organizational fit is an important factor affecting the leadership of female supervisors. It is also the basic prerequisite for whether a supervisor can be cleverly integrated into the current organization.

The interpersonal support within the organization is also particularly important for the leadership of female supervisors. In management, only by obtaining the support of employees and followers can it be beneficial to promote the good development of their leadership. For female supervisors, taking full advantage of women's unique temperament and affinity to communicate with subordinates, to establish a good relationship between the upper and lower level members, it can promote leadership. However, excessive relaxation will also reduce the authority of female managers in corporate management to some extent. Therefore, it is necessary for the leader at the next level to support and help them enhance the authority in production practice. Therefore, it can be seen that a good relationship between the upper and lower levels is a favorable condition for female supervisors to give full play

to their leadership. Yuan Xiaowen (2013) also believes that with the support of the upper level they can right decisions and exert their strength. For female supervisors, job opportunity for growth needs fair treatment. This means the remuneration, work content, procedures, rules and regulations in the company have significant impact on the leadership of female supervisors.

#### **4.7.3 Cultural factors on leadership**

Through the analysis of cultural factors on leadership, it can be concluded that the cultural factors that affect the leadership of female supervisors are mainly about corporate culture. The corporate culture here refers to diversity and inclusiveness. However, the result is insignificant.

Corporate cultural inclusiveness is mainly manifested in the recruitment, assessment and promotion structures. Corporate culture must ensure equal opportunities for men and women. The inclusion of corporate culture has an impact on leadership. The diversification of a company affects the differences in the company's treatment of different groups. The interaction between Taiwan-funded enterprises and mainland culture is the key point for whether the smooth development of mainland Taiwan-funded enterprises can be performed. Mohelska and Sokolova (2015) argued that corporate culture determines how employees understand business and how they see themselves as part of an organization. Therefore, in order to maintain their competitiveness, it is important for companies to create a favorable working environment for employees. Giving good treatment to employees will also make the organization more profitable. Ali et al. 's 2015 point of view is that corporate culture has many key values, usually manifested in accountability, adaptability, cooperation, commitment, effective communication, equal empowerment, flexibility, professionalism, trust, continuous quality improvement and respect. Having these key values, companies will run smoothly and avoid unnecessary mistakes. These values supported the results of the present study. Traditional cultural factors have insignificant effect on the leadership of female supervisors in mainland Taiwan-funded enterprises. This is mainly because some traditional concepts might have already changed. It can also be seen in this study that with the continuous development and progress in society, women supervisors have not been affected in

mainland Taiwan-funded enterprises to exert their leadership because of traditional secular cultural concepts.



## **CHAPTER 5**

### **RESEARCH CONCLUSIONS AND PROSPECTS**

This chapter mainly focuses on previous empirical findings and discussion of the results and contribution, from which future researches and draw inspiration. This chapter discusses the limitations of this study and puts forward its own suggestions for the development of female leadership in Chinese Taiwan-funded enterprises in the future.

#### **5.1 Study conclusion**

Through the study, conclusions were drawn mainly on the following points:

**I.** There are significant differences in leadership among supervisors of different gender, age, education level, job level, and industry type in personal factors., as follows:

1. In terms of gender, the proportion of men and women in the leadership of the supervisor is extremely uneven, but the perceived leadership performance of female supervisors is significantly higher than that of male. The gender imbalance in the leadership positions is caused by people's perceived prejudice against leaders and women, and low awareness of the leadership of female supervisors, resulting in men in leadership positions more easily accepted than women. The fundamental reasons for the low perception of leadership of female supervisors are: obstacles at the social environment level, obstacles at the organizational level formed by unfriendly organizational environment, and obstacles at the physical and psychological levels of women, such as family emphasis, and lack of political ambition.

2. The influence of age on the leadership of female supervisors in Taiwan-funded enterprises is highly significant, but the leadership of female supervisors aged 41-50 is optimal. The supervisors of this age group are quenched after years of first-line work. They come from the bottom level and are very familiar with the employees. They grow together and are familiar with the organizational structure and operating framework of the company. Previous work and long-term job training have leadership and management of the company. A more comprehensive and in-depth impact on the understanding of the performance in the leadership practice is more effective and conducive to the accumulation of rich management experience for female executives. It promotes easier understanding of the needs of front-line employees, paying more attention to the feelings of higher leaders, the interests of enterprises, and encourages more willingness to provide effective support and assistance to subordinates in a timely manner, and it helps easier to stimulate the passion of subordinates more easily.

3. The level of education has a significant impact on the leadership of female supervisors in Taiwan-funded enterprises. The higher the level of education, the stronger their leadership would be. Education can change people's cognition and learning from books promotes lifelong. Learning from others to deal with problems, especially complex problems, through education, can cultivate their own judgment through higher thinking ability, and then improve their own job leadership.

4. The length of service time has a significant impact on the leadership of female supervisors in Taiwan-funded enterprises. The longer the time managers have worked in management level, the more experience they naturally have in leadership, and thus their ability is better than other supervisors with shorter service hours.

5. The level of managers' positions will affect the leadership of female supervisors in Taiwan-funded enterprises. A higher position could mean that their leadership is better. Together with their previous experience, it can also support positive impact: the higher the position, the better the leadership would be.

6. The different types of enterprises will also affect the leadership of the supervisors. Taiwan-funded enterprises are mainly manufacturing and service industries in the mainland. The study found that the leadership of the service industry is better than the leadership of the manufacturing industry. In the service industry,



providing service is the main task. The managers' management is not only for employees but also for guests. That requires managers to have good leadership to have better interaction with their customers. On the other hands, the manufacturing industry is different. The leaders of the manufacturing industry follow more standardized routines to assure the consistency of production quality which is different from the leaders of the flexible service industry.

**II.** The leadership of female supervisors in Taiwan-funded enterprises in mainland China is affected by organizational factors. Internal growth opportunities, procedural rules, internal interpersonal support, and person-organizational fit in the organizational factors will also affect the leadership of female supervisors. The extent and scale of the organization can show the growth opportunity of leadership provided to the female supervisors and the rules and regulations in the company show a certain correlation for the improvement of the leadership. Interpersonal support in enterprises and the formation of leadership of women supervisors have a direct and significant influence. The company's scientific environment, reasonable and thorough procedures and rules system, transparent rewards and penalties, and objective and standardized expert assessment can effectively prevent unjust human governance evaluation system; establishes rational remuneration, working content, procedures, rules and regulations, and so on, and makes full use of women. Women's unique temperament and affinity communication with subordinates; fair treatment of all employees who want to contribute, can contribute and accomplish tasks. It will be fully supported by employees and followers. A good relationship between the upper and lower level members will help women's leadership. In other words, the good and rational procedural rules of the company have a significant and positive effect on promoting the leadership of women in the company.

**III.** The influence of cultural factors on the leadership of female supervisors is not significant. In previous studies, it is perceived that corporate culture should be people-oriented, reflect ultimate care, highlight internal corporate solidarity, emphasize internal teamwork, pay attention to collective wisdom and everyone's strength, scientifically arrange and guide employees' sense of responsibility, and establish incentive systems. Cultivating corporate performance culture is to establish a systematic career development path for employees and paying attention to career



planning of employees, will let the company members clearly see their own potential and future efforts; using advanced job performance appraisal system to scientifically evaluate each manager and ensure the harmonious progress of the overall operation of the company. This is how the influence of corporate culture moves onto the leadership of supervisors. Even though corporate culture is rooted in traditional culture, it is different from traditional culture. Thus, the difference between corporate culture and traditional culture might cause the prediction of influence on the leadership of managers. In this sense, this might be the reason why the impact of traditional culture on the leadership of women supervisors in enterprises is insignificant

## **5.2 Research enlightenment and contribution**

### **Research Enlightenment:**

Through theoretical research and empirical analysis, it provides ideas for the influencing factors of female supervisor leadership in Taiwan-funded enterprises in mainland China will drawn. For them, their leadership will be affected in various degrees in both the corporate environment and the organizational environment. Specific implications include:

In the study, it was found that women in mainland Taiwan-funded enterprises are superior to male managers in leadership in terms of empowering and encouraging interactive leadership in the participation in and the sharing of information. This may be due to the fact that women managers are generally considered more humane in thinking, richer in language expression, and have more consciousness in dealing with problems. While men may have a strong sense of responsibility, decision-making is more decisive, and logic is stronger. It is precisely because men have these characteristics that they are more willing to take risks than women, and they are widely known to be more impulsive on the outside. Moreover, education and experience are important for a supervisor for both male and female. Education is the basis for guiding the correct direction of work and affects the leadership of the supervisor. Mainland Taiwan-funded companies also need to consider these personal factors in the selection of employees.

Second, a sound corporate system and organizational management mechanism create standardized organizational rules, rigorous organizational procedures and flexible growth opportunity. These can help women executives in mainland Taiwan-funded enterprises to maximize their leadership skills and help them create better value for the company and gain greater benefits. In addition, female supervisors need to have good organizational adaptability and friendly interpersonal relationships in the company so as to help them choose the most suitable path for their career development. Comprehensively considered, the various organizational factors can easily affect the development of their own leadership and minimize or avoid the adverse effects of these factors in their own career development.

#### **Research Contribution:**

The results of this study show that cultural factors have no significant effect on the leadership of female supervisors in Taiwan-funded enterprises in mainland China. This is different from previous studies. The possible reasons for this are: Taiwan-funded enterprises in mainland China are different from other enterprises in China. The corporate culture in Taiwan-funded enterprises in mainland China is different from that in mainland China. However, an excellent corporate culture includes the common institutional values, priorities, rewards, high performance, and commitment culture and is one that employees need. Corporate culture must not only have the commonality of ideals, but also have the diversity of behaviors. Female supervisors also need to interpret corporate culture, according to actual situations and make full use of each corporate culture that suits them to create value for the company.

In addition, the contribution of this study is mainly different from previous studies in terms of research methods. It's predecessors mostly used AMOS to perform first-order measuring model. However, in this study, the second-order measuring model was used, and proven, after empirical analysis, and has proven that the second-order model is better.

### **5.3 Research limitations and prospects**

Through massive empirical analysis and trials, the study strived to meet the logic and rigor of scientific research in terms of research methods. It explores the

influencing factors of women's leadership from the individual, organizational, and cultural levels, and the study has reached a relatively rich conclusion, but with the continuous deepening of the research work, it was found that the study still had some research limitations, providing space and direction for subsequent research and development. A summary on specific points is as follows:

**I.** The selected survey sample has certain limitations. Due to time, geographical, and cost constraints, the study only selected Taiwan-funded enterprises in the High-tech Economic Development Zone of Huai'an City, Jiangsu Province, China. The research results thus have limitations. Therefore, the scope of the study could be broadened in the future. More representative areas can be selected for investigation, and the sample size and source can be expanded to increase the generalizability of the findings.

**II.** This study described only trends in the basic information. Due to time constraints, there was no in-depth understanding of the specific reasons for those trends. In-depth exploration of trends and specific reasons can be conducted in future studies.

**III.** Although this study tried to use second-order model analysis, researchers can still try to use more research methods and analysis tools in subsequent studies to conduct deeper statistical analysis of the research questions and enrich the research conclusions.

**IV.** In the empirical analysis of the influencing factors of female supervisor leadership, it was found that due to the use of predecessors' measurement scales, there were fewer questions about cultural factors and the results obtained might not be representative. Since it is a cross-cultural study, female supervisor leadership is also different in different cultural contexts. The research questions can be refined in future studies, leading to more nuanced findings.

## BIBLIOGRAPHY

- Ali, N. M., Jangga, R., Ismail, M., Kamal, S. N.-I. M., & Ali, M. N. (2015). Influence of leadership styles in creating quality work culture. *Procedia Economics and Finance*, 31, 161-169.
- Araújo-Pinzón, P., Álvarez-Dardet, C., Ramón-Jerónimo, J. M., & Flórez-López, R. (2017). Women and inter-organizational boundary spanning: A way into upper management? *European Research on Management and Business Economics*, 23(2), 70-81.
- Bender, L. R. (1980b). *Women as leaders: The impact of leader attributes of masculinity and femininity, and of follower attitudes toward women on leadership effectiveness*. State University of New York at Buffalo.
- Due Billing, Y., & Alvesson, M. (2000). Questioning the notion of feminine leadership: A critical perspective on the gender labelling of leadership. *Gender, Work & Organization*, 7(3), 144-157.
- Dunne, T. C., Aaron, J. R., McDowell, W. C., Urban, D. J., & Geho, P. R. (2016). The impact of leadership on small business innovativeness. *Journal of Business Research*, 69(11), 4876-4881.
- Fangfang, D. (2008). *Study on female leadership and influencing factors in Chinese local enterprises*. (Master's degree thesis), Zhejiang University of Industry and Commerce.
- Feng, Z. (2017). Comprehensive quality assessment as an educational method. *Shanghai Education Research*(6), 1-1.
- Geller, E. S. (2003). Leadership to overcome resistance to change: It takes more than consequence control. *Journal of organizational behavior management*, 22(3), 29-49.
- Guihua, L. (2005). *Study on women leader's charisma and leadership style*. (Master's degree thesis), Sichuan University.
- House, R. J. (1976). A 1976 Theory of Charismatic Leadership. Working Paper Series 76-06.
- House, R. J., & Howell, J. M. (1992). Personality and charismatic leadership. *The Leadership Quarterly*, 3(2), 81-108.
- Hulme, V. A. (2006). What Makes a Good Leader The China Business Review.
- Jianxin, X. (2009). Enterprise culture management of Taiwan enterprises in mainland China. *Journal of Jiangsu University of Radio and Television*, 20(6), 81-83.
- Kusterer, D. J., & Schmitz, P. W. (2017). The management of innovation: Experimental evidence. *Games and Economic Behavior*, 104, 706-725. doi: 10.1016/j.geb.2017.06.011
- Ladegaard, H. J. (2011). 'Doing power' at work: Responding to male and female management styles in a global business corporation. *Journal of Pragmatics*, 43(1), 4-19.
- liang, L. C. (2008). *A study on the development of Taiwan enterprises in China*. (Master's degree thesis), Tianjin University.
- Libo, M. (2007). *Family business life cycle*. (Doctoral thesis), Northeast University of Finance and Economics.
- Lifang, D. (2007). Analysis of characteristics of female managers in enterprise management. *Mechanical management development*, 3. doi:



10.16525/j.cnki.cn14-1134/th.2007.01.072

- Ling, H. (2005). *Study on charismatic leadership model of Chinese local enterprises*. (Master's degree thesis), University of Foreign Economic Relations and Trade.
- Minglong, W. (2003). *SPSS statistical application practice*. Beijing Science Press.
- Minglong, W. (2013). *Structural equation model: AMOS practical advance*. Chongqing University Press.
- Mingxu, B. (2017). *The impact of change leadership on the patchwork of team resources*. (Doctoral thesis).
- Mohelska, H., & Sokolova, M. (2015). Organisational culture and leadership—joint vessels? *Procedia-Social and Behavioral Sciences*, 171, 1011-1016.
- Ningning, Q. (2016). From the difference between men and women to the respect of men and women: a discussion on the theory of women in the Han dynasty and its causes. *Thought front*, 42(2), 123-128.
- Nohe, C., Michaelis, B., Menges, J. I., Zhang, Z., & Sonntag, K. (2013). Charisma and organizational change: A multilevel study of perceived charisma, commitment to change, and team performance. *The Leadership Quarterly*, 24(2), 378-389. doi: 10.1016/j.leaqua.2013.02.001
- Paris, L. D., Howell, J. P., Dorfman, P. W., & Hanges, P. J. (2009). Preferred leadership prototypes of male and female leaders in 27 countries. *Journal of International Business Studies*, 40(8), 1396-1405.
- Peck, J. A., & Hogue, M. (2017). Acting with the best of intentions... or not: A typology and model of impression management in leadership. *The Leadership Quarterly*. doi: 10.1016/j.leaqua.2017.10.001
- Qing, M. J. H. G. (2006). Leadership five-force model research. *Leading Science*, 9, 20-22.
- Qingtao, Z. (2009). Development of enterprise female achievement motivation. *Southeast Asia*(3), 105-108.
- Qiufen, T. (2013). *Research on improvement of women's leadership in Chinese enterprises*. (Master's degree thesis), Dalian Maritime University.
- Rolková, M., & Farkašová, V. (2015). The Features of Participative Management Style. *Procedia Economics and Finance*, 23, 1383-1387.
- Rosener, J. B. (1990). Ways women lead. *Harvard business review*, 68(6), 119-125.
- Tepping, B. J. (2014). Elementary Sampling Theory, Taro Yamane. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967. Pp. x-405. *Journal of the American Statistical Association*, 63(322), 728-730. doi: 10.1080/01621459.1968.11009297
- Valença, G., & Alves, C. (2017). A theory of power in emerging software ecosystems formed by small-to-medium enterprises. *Journal of Systems and Software*, 134, 76-104.
- Verčič, A. T., & Verčič, D. (2011). Generic charisma—Conceptualization and measurement. *Public Relations Review*, 37(1), 12-19.
- Weijuan, C. (2010). *Research on women's leadership in Chinese enterprises*. (Master's degree thesis), Changchun University of Technology.
- William J. Doll, W. X., Gholamreza Torkzadeh. (1994). A Confirmatory Factor Analysis of the End-User Computing Satisfaction Instrument A Confirmatory Factor Analysis of the End-User Computing Satisfaction Instrument. *MIS Quarterly*, 18, 453-461.

- Xavier, S. R., Ahmad, S. Z., Nor, L. M., & Yusof, M. (2012). Women entrepreneurs: Making a change from employment to small and medium business ownership. *Procedia Economics and Finance*, 4, 321-334.
- Xiangyi, Y. (2007). *Study on competency model of middle managers*. (Doctoral thesis), Fudan University.
- Xiaowen, Y. (2013). *Study on job stress of middle level female managers*. (Master's degree thesis), Capital University of Economics and Trade.
- Yong, Z. (2011). A preliminary study on female leadership under the western leadership theory. *Hubei Education (Leadership Science Forum)*, 5, 026.
- Zhang Lihua, L. Y. Y. D. (1999). Cross-cultural conflict and its management of joint ventures. *Journal of Dalian University of Technology: Social Science*(2), 27-35.
- Zhiguo, W. (2008). *Study on the association model between transformational leadership, organizational innovation atmosphere and innovation performance*. (Doctoral thesis), Shanghai Jiaotong University.
- Zhonghai, Y. (1998). Discussion on the regularity of the overall growth of female leaders. *Women's research*.
- Zulch, B. (2014). Leadership Communication in Project Management. *Procedia -Social and Behavioral Sciences*, 119, 172-181.



## APPENDICES

### Questionnaire for the Study on Influencing Factors of Leadership

**Dear friend:**

**Hello!**

In order to understand the influencing factors of supervisor leadership, we selected some companies as business representatives according to scientific sampling methods, and your company is one of them. The survey was conducted in an anonymous manner, and, in accordance with the national statistics law, we will keep the statistics confidential, and all personal data will appear statistically.

This survey does not need filling in the unit and name. There is no right or wrong answer. It will delay you for about 15 minutes. Please fill in according to your actual situation. Your answer will represent many friends like your company. I hope you will complete it seriously.

Thank you for your cooperation!

"Influencing factors of supervisor leadership" survey group

March 20, 2018

Researcher: Liu Shuxian (Master of Management)

Tel: 13705232067 E-mail: 543446219qq.com

#### **Fill in instructions**

- 1、 Please play "√" after each question. ☐**
- 2、 Without special instructions, each question can only have one answer.**
- 3、 When filling out the questionnaire, please do not consult with others.**

### The basic situation of your direct supervisor

1. The age of the supervisor is

☐30 years old ☐31-40 years old ☐41-50 years old ☐51 years old or older

2. Gender of supervisor

☐Male ☐Female

3. Level of education of supervisor

☐ degree in high school and below  
☐ Specialist  
☐ Bachelor  
☐ master's degree  
☐ PhD and above

4. The position of the supervisor

☐ Grass-roots manager (management position at the front line, such as chief, leader, team leader, etc.)  
☐ Middle manager (as the company's director, manager and other core positions)  
☐ Senior manager (responsible for the company's strategic planning, business operation model, etc.)

5. The number of years of work of the supervisor in the company

☐One year or less ☐three to five years ☐ five to ten years ☐or more

6. The type of business you currently work for

☐Manufacturing industry ☐ service industry ☐ agricultural sector ☐chemical industry other \_\_\_\_\_

**Do you agree with the following description based on your opinion of your immediate supervisor**

Serial Number	Question	Highly Agree	Moderately Agree	Neutral	Moderately Disagree	Highly disagree
1	He or she is good at communicating and communicating with different personalities					
2	He or she is able to listen patiently and accept different opinions					
3	The problem of his or her work is often focused on the overall situation					
4	He or she can change his or her management ideas and methods with the times					
5	He or she is good at encouraging employees to establish innovation awareness and improve innovation capabilities					
6	He or she can boldly innovate management methods to complete tasks efficiently					
7	He or she can solve sudden problems calmly, calmly and flexibly					
8	He or she can arrange time systematically, effectively and reasonably allocate tasks					
9	He or she is good at summarizing and flexibly applying scattered resources to management					
10	He or she is good at discovering the strengths of others					
11	He or she is good at uniting the upper and lower levels and closely cooperates for the completion of work tasks					
12	He or she specializes in systematic arrangements to maximize the role of the guarantor, the material and the finance					
13	He (she) cares for talents, cherishes talents, and is good at retaining talents					
14	He or she is under pressure to control emotions and soothe others					
15	He or she is sensible, calm, and less irritated at work					
16	He (she) strives to strengthen team building and make the work atmosphere good					
17	He or she can actively accept corporate culture and lead everyone to complete tasks efficiently					
18	He is a person who can express himself clearly and happily					
19	He is an honest man					
20	He or she is a person who is always satisfied with life					

21	I have a good time with him or her and is easy to get along with					
22	He (she) is a very cool person					
23	The company attaches great importance to the cultivation of him (her)					
24	The current job enables him or her to give full play to his or her advantages and do his or her best					
25	The company provides a broad space for his or her career development					
26	He or she is generally satisfied with the present work					
27	He or she can be alone in his or her job and be responsible for his or her work					
28	He (she) is well adapted to the company's work spirit and management culture					
29	His or her values and characteristics are consistent with the company's requirements for employees					
30	He (she) is very comfortable with the company's working atmosphere					
31	The present job and duties match his or her expectations					
32	In the present company he or she has the opportunity to get promoted and grow					
33	His or her career is going well					
34	He (she) understands the problems and needs of my work					
35	No matter how much formal power he or she has, he or she will use his or her own power to help me solve problems at work.					
36	No matter how much position power he or she has, he or she will defend me					
37	I have enough confidence in him (her) that he (she) will defend me if I am not present					
38	He has a good relationship with me					
39	He or she works well with other members of the department					
40	His or her department will do its best to help him or her work					

**Third, your personal opinion (please answer the following questions based on your direct opinion) Do you agree with the following description?**

Serial Number	Question	Highly Agree	Moderately Agree	Neutral	Moderately Disagree	Highly disagree
41	Women are still unfit for top management					
42	You are in favor of the idea of "outside the man"					
43	Your company is culturally diverse and inclusive					
44	The company has a good salary					
45	The company has clear regulations on work tasks					
46	Company internal management emphasizes handling work according to work procedures					
47	The company refers to certain standards to determine career promotion					
48	All departments within the company work according to the rules and regulations					

**Fourth, what do you think are the factors that affect the leadership of the company?**  
(can be written below)

### Annex Table

Table 4.23 Homology deviation test

Ingredients	initial eigenvalue			Extract Sum of Squares Load		
	Total	% of variance	Cumulative%	Total	% of variance	Cumulative%
1	9.170	16.982	16.982	9.170	16.982	16.982
2	2.066	3.825	20.807	2.066	3.825	20.807
3	2.037	3.772	24.579	2.037	3.772	24.579
4	1.829	3.387	27.966	1.829	3.387	27.966
5	1.605	2.973	30.939	1.605	2.973	30.939
6	1.536	2.844	33.783	1.536	2.844	33.783
7	1.390	2.575	36.358	1.390	2.575	36.358
8	1.342	2.485	38.843	1.342	2.485	38.843
9	1.322	2.448	41.292	1.322	2.448	41.292
10	1.187	2.198	43.489	1.187	2.198	43.489
11	1.164	2.156	45.645	1.164	2.156	45.645
12	1.147	2.123	47.769	1.147	2.123	47.769
13	1.073	1.987	49.756	1.073	1.987	49.756
14	1.035	1.917	51.673	1.035	1.917	51.673
15	1.028	1.903	53.576	1.028	1.903	53.576
16	.993	1.838	55.414			
17	.972	1.800	57.214			
18	.949	1.757	58.970			
19	.937	1.736	60.707			
20	.885	1.639	62.345			
21	.878	1.626	63.971			
22	.858	1.588	65.559			
23	.847	1.569	67.128			
24	.822	1.522	68.650			
25	.811	1.502	70.152			
26	.794	1.470	71.622			
27	.771	1.428	73.050			
28	.763	1.412	74.462			
29	.744	1.377	75.839			
30	.718	1.329	77.168			
31	.707	1.309	78.477			
32	.696	1.288	79.766			
33	.664	1.230	80.996			
34	.656	1.214	82.210			
35	.636	1.178	83.388			
36	.612	1.133	84.522			
37	.586	1.085	85.607			
38	.571	1.057	86.664			
39	.560	1.038	87.701			
40	.547	1.014	88.715			
41	.539	.998	89.713			
42	.518	.960	90.673			
43	.508	.941	91.614			
44	.493	.913	92.527			
45	.477	.883	93.410			
46	.475	.880	94.290			



Ingredients	initial eigenvalue			Extract Sum of Squares Load		
	Total	% of variance	Cumulative%	Total	% of variance	Cumulative%
47	.462	.856	95.146			
48	.427	.790	95.936			
49	.406	.751	96.687			
50	.393	.727	97.414			
51	.383	.709	98.123			
52	.368	.682	98.805			
53	.341	.631	99.437			
54	.304	.563	100.000			

Extraction method: principal component analysis.

Table 4.24 Descriptive statistical analysis of education

	N	Mean	Standard deviation
High school and below	40	2.5545	.62572
College	228	2.3997	.53924
Undergraduate	308	2.2659	.47187
Masters	58	1.9765	.43158
Doctor and above	12	1.8371	.41409
Total	646	2.2971	.52235

Table 4.25 A variance homogeneity test of education on leadership

Levene statistic	df1	df2	Significance
4.105	4	641	.003

Table 4.26 Multiple comparisons of educational attainment on leadership

Multiple comparisons						
(I)educational attainment	(J)educational attainment	Mean Difference (I-J)	standard error	Significance	95% confidence interval lower limit    upper limit	
High school and below	College	.15482	.08621	.377	-.0810	.3907
	Undergraduate	.28861*	.08453	.006	.0574	.5198
	Masters	.57806*	.10337	.000	.2953	.8608
	Doctor and above	.71742*	.16554	.000	.2646	1.1703
College	High school and below	-.15482	.08621	.377	-.3907	.0810
	Undergraduate	.13378*	.04394	.020	.0136	.2540
	Masters	.42323*	.07396	.000	.2209	.6256
	Doctor and above	.56260*	.14896	.002	.1551	.9701
Undergraduate	High school and below	-.28861*	.08453	.006	-.5198	-.0574
	College	-.13378*	.04394	.020	-.2540	-.0136
	Masters	.28945*	.07199	.001	.0925	.4864
	Doctor and above	.42882*	.14799	.032	.0240	.8336
Masters	High school and below	-.57806*	.10337	.000	-.8608	-.2953
	College	-.42323*	.07396	.000	-.6256	-.2209
	Undergraduate	-.28945*	.07199	.001	-.4864	-.0925
	Doctor and above	.13937	.15950	.906	-.2969	.5757
Doctor and above	High school and below	-.71742*	.16554	.000	-1.1703	-.2646
	College	-.56260*	.14896	.002	-.9701	-.1551
	Undergraduate	-.42882*	.14799	.032	-.8336	-.0240
	Masters	-.13937	.15950	.906	-.5757	.2969

Table 4.27 Descriptive statistics at the job level

	N	Mean	Standard deviation
Grassroots managers	316	2.3533	.56084
Middle managers	237	2.2915	.45925
Senior Managers	93	2.1202	.50236
Total	646	2.2971	.52235

Table 4.28 Variance homogeneity test of position on leadership

Levene statistic	df1	df2	Significance
6.307	2	643	.002

Table 4.29 Multiple comparisons of positions on leadership

Multiple comparisons							
(I)Position	(J)Position	Mean Difference (I-J)	standard error	Significance	95% confidence interval		
					lower limit	upper limit	
Tukey HSD	Grassroots managers	Middle managers	.06176	.04445	.347	-.0427	.1662
		<b>Senior Managers</b>	<b>.23305*</b>	<b>.06103</b>	<b>.000</b>	<b>.0897</b>	<b>.3764</b>
	Middle managers	Grassroots managers	-.06176	.04445	.347	-.1662	.0427
		<b>Senior Managers</b>	<b>.17129*</b>	<b>.06330</b>	<b>.019</b>	<b>.0226</b>	<b>.3200</b>
	Senior Manager	<b>Grassroots managers</b>	<b>-.23305*</b>	<b>.06103</b>	<b>.000</b>	<b>-.3764</b>	<b>-.0897</b>
		<b>Middle managers</b>	<b>-.17129*</b>	<b>.06330</b>	<b>.019</b>	<b>-.3200</b>	<b>-.0226</b>

\*.The significance level of the mean difference was 0.05.

Table 4.30 Descriptive statistics of working years

	N	Mean	Standard deviation
One year or less	38	2.4761	.65621
One to three years	92	2.4432	.58041
Three to five years	209	2.3049	.50211
Five to ten years	181	2.2659	.50665
More than ten years	126	2.1681	.44980
Total	646	2.2971	.52235

Table 4.31 Variance homogeneity test of leadership by working years

Levene statistic	df1	df2	Significance
3.628	4	641	.006

Table 4.32 Multiple comparisons of working years on leadership

Multiple comparisons						
	(I)Years of work	(J)Years of work	Mean Difference (I-J)	standard error	Significance	95% confidence interval
						lower limit upper limit
Tukey HSD	One year or less	One to three years	.03289	.09946	.997	-.2392 .3050
		Three to five years	.17116	.09096	.328	-.0777 .4200
		Five to ten years	.21013	.09204	.152	-.0416 .4619
		More than ten years	.30797*	.09546	.011	.0468 .5691

**Multiple comparisons**

(I)Years of work	(J)Years of work	Mean Difference (I-J)	standard error	Significance	95% confidence interval	
					lower limit	upper limit
One to three years	One year or less	-.03289	.09946	.997	-.3050	.2392
	Three to five years	.13827	.06453	.203	-.0383	.3148
	Five to ten years	.17724	.06604	.057	-.0034	.3579
	<b>More than ten years</b>	<b>.27507*</b>	<b>.07073</b>	<b>.001</b>	<b>.0816</b>	<b>.4686</b>
Three to five years	One year or less	-.17116	.09096	.328	-.4200	.0777
	One to three years	-.13827	.06453	.203	-.3148	.0383
	Five to ten years	.03897	.05237	.946	-.1043	.1822
	More than ten years	.13681	.05817	.130	-.0223	.2959
Five to ten years	One year or less	-.21013	.09204	.152	-.4619	.0416
	One to three years	-.17724	.06604	.057	-.3579	.0034
	Three to five years	-.03897	.05237	.946	-.1822	.1043
	More than ten years	.09784	.05984	.476	-.0659	.2615
More than ten years	<b>One year or less</b>	<b>-.30797*</b>	<b>.09546</b>	<b>.011</b>	<b>-.5691</b>	<b>-.0468</b>
	<b>One to three years</b>	<b>-.27507*</b>	<b>.07073</b>	<b>.001</b>	<b>-.4686</b>	<b>-.0816</b>
	Three to five years	-.13681	.05817	.130	-.2959	.0223
	Five to ten years	-.09784	.05984	.476	-.2615	.0659

\*.The significance level of the mean difference was .05.

## BIOGRAPHY

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