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Leadership And Innovative Environment In Organizations

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LEADERSHIP AND INNOVATIVE ENVIRONMENT

IN ORGANIZATIONS

being

A Thesis Presented to the Graduate Faculty

of the Fort Hays State University in

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by

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ABSTRACT

This article examines the relationship between leader-follower friendships and the innovative environment in organizations. The results of the study reveal that leader-follower friendships are positively related to the measurements of innovative environment. Organizations with an innovative environment exhibit strong overall leader-follower friendships. Measures of leader-follower friendships are obtained from Boyd and Taylor's developmental approach to the examination of friendships between leaders and followers. In order to find out the determinations of an innovative environment, this paper reviews the work of Van der Sluis, Baldridge, Burnham, Bharadwaj, Menon, McLean, and others. The article synthesizes the literature, and lists the factors that influence the creation of an innovative environment in organizations. Using data from a Chinese electronics manufacturing firm, the support for the hypothesis is found. The results indicate that in innovative groups, the friendships between leaders and followers are considered as strong. Implications of the findings to practices are discussed.

ACKNOWLEDGMENTS

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CHAPTER 1: INTRODUCTION

What contributes to successful organizations? Although different people provide

different answers to this question due because of their respective points of view, what is

conclusive is that leadership is one of the key elements to successful organizations. The

team of leaders, including organizational, departmental, and team leaders, assume their

respective roles and work together to fulfill their responsibilities. It is argued that

executive leadership explains much of a group's performance. However, lower level

leaders, such as team leaders, are as important as upper level leaders: they "direct and

coordinate team members, assess team performance, allocate tasks, motivate subordinates,

plan and organize, and maintain a positive team environment" (Salas et al., 2004, p.331).

We cannot say the upper level leadership in organizations is more important than lower

level leadership, because they all contribute to their organizations in different ways.

People have long focused on exploring the characteristics of successful leaders from

different angles. While much attention was paid to the personality of leaders, less was

paid to the internal and external social networks of leaders. However, leaders' internal

social networks, which means their relationships with their group members, are also a

factor that influence the group performance. Mehra and others (2006) studied the

relationship between leader-follower friendships and group performance, and found that

the friendships between leaders and followers are indeed positively related to their group

performance.

Further examination of the studies of the leader-member exchanges and group performance shows that organizational innovation is possibly one of the factors that link the leader-follower relationship with organizational performance. Graen and Uhl-Bien (1995) found that high quality leader-follower friendships lead to continual organizational innovation. It was also demonstrated that high performance organizations are always innovative organizations (Akdemir et al., 2010).

Following the arguments and findings of previous studies, this paper argues that friendship between leaders and followers in an organization is positively related to the innovative environment, and thus improves the innovation in organizations, and finally increases the group performance. There have been several studies focusing on the relationship between leader-follower friendship and organizational performance and studies focusing on the relationship between innovation and performance. However, there has not been research on the relationship between leader-follower friendship and creation of an innovative environment. This paper uses the data collected from a Chinese company and attempts to test empirically if leadership-follower friendship is positively related to the creation of an innovative environment. The findings from this study will help explain why leader-follower relationship affects the performance of an organization.

CHAPTER 2: LITERATURE REVIEW

Leadership has always been an important topic in the field of organization studies.

People like to talk about leadership, and researchers continue to investigate and seek it.

One of the reasons that it is such an important topic of discussion is that leadership is one

of the key elements to successful organizations. Leaders can either make a great

organization or destroy it. Great leaders help their organizations achieve goals and

motivate the subordinates, while poor leaders fail. But what exactly is leadership?

Definitions of Leadership

According to Northouse (2012), leadership is "a process whereby an individual

influences a group of individuals to achieve a common goal" (p.5). This definition

highlights four essential components to leadership. First of all, leadership can be defined

as a "process." This means that it is an interactive system that provides interaction

between a leader and the followers. Leaders affect their followers, while, at the same time,

they are also affected by the followers. Second, leadership means "influence." It describes

how a leader affects the followers. Third, leadership only occurs in a group of people.

These people have a common goal, and the leader tries his or her best to influence them.

Finally, leadership includes goal attainment. Leaders direct a group of people to achieve

goals through co-working. In this definition of "leadership," how well a leader works

with subordinates and relates to them becomes important. In fact, leading an organization

requires the skill of dealing with subordinates.

In Katz's (1995) perspective, the performance of a leader and organization depends on the leader's technical, human, and conceptual skills. Human skill is "the executive's ability to work effectively as a group member and to build cooperative efforts within the team he leads" (p.34), and it is concerned with how the leader works with subordinates.

Leader-Member Exchange Theory

Clearly, the relationship between leaders and subordinates is one of the factors that affect group performance, and the importance of it can be illustrated by the leader-member exchange theory. Graen and Uhl-Bien (1995) found that high leader-member exchanges leads to high group performance, less turnover, more job satisfaction, greater participation and organizational commitment, more performance appraisal and employee empowerment, continual innovation, and procedural and distributive justice. In addition, Song's (2006) findings show that high quality leader-member exchanges also produce high employee performance and productivity. Employees with high quality leader-member exchanges have "a high level of goal commitment and are more willing to exert extra efforts in the workplace" (p.48). Therefore, leaders should "nurture high-quality exchanges with their subordinates" (Northouse, 2012, p.169).

Leaders' Internal Social Networks with Their Subordinates

Based on the leader-member exchange theory and other earlier work, Mehra and his colleagues seek to move beyond these works and examine the leaders' "external social network ties" as well as their "internal social network ties" (Mehra et al., 2006, p.65). They define the "external" social networks as leaders' interpersonal relationships with their peers and superiors, and the "internal" social networks as leaders' interpersonal relationships with their subordinates. They suggest that "the centrality of the group leader within the group's friendship network will be positively related to the group's objective performance" (Mehra et al., 2006, p.67).

In order to prove the accuracy of the hypothesis, they did research in a financial services firm to investigate how leaders' centrality in internal social network ties is related to group performance. They found that the leaders' internal social networks with the subordinates are indeed related to group performance, and "in high performance groups, leaders were centrally located within the group's friendship network, and the overall internal friendship network within the group exhibited high density " (Mehra et al., 2006, p.74). Therefore, the friendship between leaders and their subordinates is actually one of the items that may affect group performance. A strong leader-follower friendship will improve the group performance, while a weak relationship between the leader and subordinates may lead to poor group performance. Understanding and applying this

theory is very important for leaders, because it provides a new way to improve group performance.

High Performance Organizations and Innovative Organizations

Research conducted by Akdemir and others (2010) shows that high performance organizations, actually, require some specific characteristics besides leadership. For example, higher performance organizations focus on human and knowledge factors—they recruit the best talent and the best knowledge management systems in workplace. High performance organizations make both short-term and long-term plans—they deal with the current situation and control the future. High performance organizations think fun first, business last, and seek work-life balance—they help their employees enjoy their jobs and experience fulfillment through their jobs. High performance organizations also encourage innovation and embrace changes—they comply with the time trend and adjust their strategies (Akdemir et al., 2010).

Of the factors that lead to high performance in an organization, innovation is particularly important. One of the characteristics found by Akdemir and others (2010) is high performance organizations' "encouragement of innovation and openness to technology" (p.235). An organization's support of innovation and openness to technology is one of the key factors for high performance organization.

The technology could be either tangible or intangible. Knowledge and techniques are intangible assets, while equipment and machinery are tangible assets. In high performance organizations, both the managerial and operational levels are willing to learn knowledge and create new knowledge (Akdemir et al., 2010).

After studying the relationship between organizational innovation and performance, Damanpour and Evan (1984) found that "administrative and technical innovations have a higher correlation in high-performance organizations than in low-performance organizations" (p.392). High performing organizations generally sponsor change. They not only invite the people who sponsor change into the organization, but they also set up a network in order to sustain these sponsors. They also demonstrate high levels of commitment to change. Moreover, high performing organizations always share desire for changes (Kauhan et al., 2003, p.242). Other experts, such as, Tushman and Nadler (1986)claimed that "once highly innovative organizations become trapped by their own success" and only sustained innovation made organizations exceptional (p.75).

CHAPTER 3: HYPOTHESIS AND METHODOLOGY

Hypothesis

Review of the relevant literature shows that 1) higher quality of leader-member

exchanges have positive outcomes for organizations, and organizational innovation is one

manifestation of it, which means higher level exchanges between leaders and followers

leads to a higher level of innovations; 2) continual innovation, on the other hand, is also

an effective way to create successful and high performance organizations; and 3) leaders'

friendships with their subordinates are indeed positively related to their group

performances. Previous studies indicate that both leadership and innovation contribute to

organizational performance. This study moves a little further and argues that leadership

and innovation are not independent factors, but instead they are interdependent.

Leadership is one of the factors that would positively affect innovation. In other words,

establishing good leader-follower relationships improves the organizational innovation,

and the improved innovation further leads to increased group performances. The

hypothesis this study intends to test is thus:

Close leader-follower friendships improves the

innovation level in an organization.

In this hypothesis, the independent variable is leadership, and the dependent variable

is innovation level. To test this hypothesis, leadership and innovation need to be better

defined to facilitate the measuring of them.

Development of Leader-Follower Friendships

Boyd and Taylor (1998) examined "how friendship relationships between leaders and followers develop over time and the extent to which the presence of friendship contributes to effective versus ineffective working relationships" (p.2). According to this paper, the leader-follower friendship has traversed four phases of development: "the friendship potential stage, the exploration stage, the casual friend stage, and the close friend stage." Factors that may encourage the initial attraction between leaders and followers are their attitudinal and demographic similarity and their physical proximity.

It is clear that people are always attracted to people who are similar to them. Therefore, leaders and followers are more likely to develop friendship when the leaders share the similar attitudes and beliefs with the followers. The similarity of demographic characteristics between leaders and the subordinates may also increase their attraction (Boyd & Taylor, 1998).

In addition, physical proximity is another factor that influences the interaction and attraction of leaders and followers, because it decides the means and frequency of communication between them. The organization also plays an important role in the development of leader-follower friendship. In the organization whose organizational factors, such as work or structural characteristic favoring frequent informal contact

between leader and subordinates, the friendship will be likely to form, and vice versa.

The leader-follower friendship will also be likely to form in the country and organization where the power distance is small. Power distance indicates "the extent to which a society accepts the fact that power in institutions and organizations is distributed unequally" (Hofstede, 1980, p.45). Power differences are different among countries, because they are decided by cultures. China, in fact, is one of the countries that have "large power distances or believe that power is distributed unevenly in organizations and society" (Fernandez et al., 1997, p.49-50). In high power distance organizations, subordinates show their "strong deference to authority figures" and act as "less reliant on the reciprocity norm with respect to their performance contributions" (Farh et al, 2007, p.717).

In the second stage, the relationship between leaders and followers by nature is very superficial, and it lacks both breadth and depth. In this stage, leaders and followers try to form relationships, because both of them find that the rewards obtained from the relationship are greater than the costs. Therefore, the relationship will be developed if both leaders and subordinates agree on the idea that the relationship between them can provide high rewards. In addition, the "similarity in core values between leaders and followers" also fosters their friendship. While the attitudinal and demographic similarities predict and encourage the initial interaction between leaders and subordinates, the

similarity in core values is a kind of important influence on continued interaction (Boyd & Taylor, 1998).

In the third stage, the relationship between leaders and followers is characterized as casual friendship. People in the casual friendship stage would like to "describe their relationship in terms of liking for one another" (Boyd & Taylor, 1998, p.12). Leaders will attribute the exceptional performance of liked subordinates to internal causes, while attributing the exceptional performance of disliked subordinates to external causes. On the other hand, leaders will attribute the poor performance of liked subordinates to external causes, while attributing the poor performance of disliked subordinates to internal causes. However, for the non-friends subordinates, the attribution biases will be altered, and their performance will be evaluated favorably if their relationships with the leader progresses to a higher level.

In the fourth stage, leaders and followers become close friends. The communication between them is both in breadth and depth. They tell each other a lot, including both work and non-work information. Moreover, they support each other on a personal, as well as professional level. When compared with transactional leaders, transformational leaders are more likely to develop friendship with the subordinates (Boyd & Taylor, 1998).

In a transactional leadership, both leaders and followers receive something of value. In other words, the exchange between these two parties is the key to a transactional

leadership. Therefore, the transactional leadership works in the way that leaders provide followers with something the followers want, such as a pay raise on goal accomplishments (Humphreys, 2001).

In contrast, there is no such exchange between leaders and followers in a transformational leadership (Humphreys, 2001). Transformational leaders actually "transform or change the basic values, beliefs, and attitudes of followers so that they are willing to perform beyond the minimum levels specified by the organization" (Podsakoff et al., 1990, p.108).

There are four components to the style of transformational leadership. They are inspirational motivation, idealized influence, individualized consideration, and intellectual stimulation (Kark et al., 2003). In order to inspire and motivate subordinates, successful transformational leaders create attractive visions of the future and then present and explain them to followers. Furthermore, transformational leaders serve as models for subordinates in order to demonstrate ethical standards. They also support, encourage, and coach their subordinates, as well as teach their subordinates to view problems from different perspectives (Kark et al., 2003).

Generally speaking, physical proximity and attitudinal similarity between leaders and followers are two main characteristics of the friendship in leader-follower relationships in the friendship potential stage. Other characteristics, such as the utilizing

informal networks of communication and minimizing the power distance between leaders

and followers also support their friendships. In addition, some organizational structures

and cultures foster the friendship between leaders and followers, too (Boyd & Taylor,

1998).

Friendships between leaders and followers in the exploration stage are featured by: 1)

both the leaders and followers in one group perceive that the rewords they can obtain

from their relationships are higher than their costs; and 2) they have similar work values.

The attribution process, when leaders and followers are friends, is totally different from

the attribution process when they are not friends. Therefore, the leaders and followers can

be referred to as "casual friends," if leaders attribute the exceptional performances of their

followers to internal causes, and their poor performances to external causes. When

leaders attribute their followers' exceptional performances to external causes, and poor

performances to internal causes, leaders and their followers are not friends. Finally, the

leaders who would like to develop close friendships with their followers are always

transformational leaders, and the friendships in this stage is embodied in the mutual

support between leaders and followers at a professional level, as well as a personal level

(Boyd & Taylor, 1998).

Definitions of Innovation

Innovation was extensively studied and there are many definitions. For example,

innovation, as defined by Pierce and Delbecq (1977) is "the initiation, adoption and implementation of new ideas or activity in an organizational setting" (p.27). Innovation in an organization could also be referred to as the "the implementation of new producers or ideas" (Evan & Black, 1967, p.519). Besides these, Schein (1994) definitely held the view that innovation required "new missions, new goals, new products and services, new ways of getting things done, and even new values and assumptions", an organization should have the ability to "adopt to rapidly changing environmental conditions" (p.125). Because of the diverse answers to the definition of organizational innovation, it became even more difficult to measure the degree of innovation among different organizations. However, what was conclusive was that all of the innovative organizations created an environment which was in favor of innovations. When compared with the innovation in organizations, the innovative environment was easier to define and explore, because certain characteristics constituted an innovative environment.

Creating Innovative Environment in Organizations

Van der Sluis (2004) assumed that innovation by individuals in organizations is affected and complicated by both individual and organizational factors. High performance organizations know it better than others that "employees with specific personal characteristics who work in environments characterized by favorable climates and management support for learning and innovation, will be more likely to develop and

innovate than others" (p.6).

For organizations, their employees' learning and cognitive behaviors are considered as one of the key factors to innovation. If employees would like to generate new ideas, do experiments, and implement ideas, the organization would be more innovative. However, the organization plays an important role in helping develop employees' character and behavior. Baldridge and Burnham (1975) claimed that the characteristics of employees were not the "important determinants of innovative behavior among people in complex organizations" (p.165), but the characteristics of an organization had great influences on the organization's innovative behavior.

Bharadwaj and Menon (2000) also found that "high levels of organizational creativity mechanisms (even in the presence of low levels of individual creativity) led to significantly superior innovation performance than low levels of organizational and individual creativity mechanisms" (p.424). Therefore, the determinants of innovation are organizational factors.

There are some characteristics of innovative organizations. First, employees who are granted more freedom and autonomy are more innovative, because "the level of autonomy was closely associated with individual learning and innovation" (Van der Sluis, 2004, p.5). Although employees still do not have the right to decide what goals to achieve, with more freedom and autonomy, they are allowed to select the means toward achieving

goals. Giving employees more freedom and autonomy promotes creativity and innovations in organizations (McLean, 2005).

On the other hand, the climate for innovation and resources are another two important factors for organizations. In order to create a supportive learning and innovation climate in an organization, the leaders should "show role modeling behaviors, provide learning opportunities, build learning into organizational progresses, and act as a learning champion" (p.11). Time and money are two main kinds of resources. Given proper amount of time and money, the employees' creativity will be boosted (McLean, 2005). According to McLean (2005), other kinds of supports that organizations should provide include organizational encouragement, supervisory encouragement, and work group encouragement. First, leaders in an organization should encourage an open flow of communication with other groups. Leaders should also encourage the idea generation of employees, help them develop and evaluate their ideas, and encourage them to participate in the decision making and management processes. Other approaches leaders could take include allowing diversity among group members, communicate goals to followers clearly, explain how these goals should be accomplished, recognize the employees' accomplishment and reward them, and also provide task support.

According to the literature, the organizational supports for innovation could be the organizational encouragement, supervisory encouragement, work group encouragement,

freedom and autonomy, and resources (McLean, 2005).

The organizational encouragement includes the encouragement of idea generation and evaluation, an open flow of communication with other groups, and the followers' participation in the management and decision-making process. Supervisory encouragement, however, tells leaders that they should: 1) communicate the goals clearly, 2) set expectations for how the goals are accomplished, 3) recognize followers' accomplishments and reward them, and 4) provide task support when followers meet difficulties. Work group encouragement means the emphasis on diversity among group members. Freedom and autonomy imply that followers should be given the right to decide how to accomplish the goals by themselves. If they have some new ideas, giving them enough resources of both time and money is also necessary.

In addition, the managerial level's support for learning and creativity is also an important influence for the creation of innovative environment in organizations (Akdemir et al., 2010). First, the leaders should encourage and support innovation in organizations. Once the leaders think innovation is important, they will be more likely to create an innovative environment. Second, the leaders' openness to technology is obviously important, and technology, here, refers to the combination of both techniques and equipment. Third, supportive leaders will not only ask the followers to learn and create knowledge, but they also ask themselves to do these. Besides, making well-understood

policies and manuals and providing followers with training opportunities are the things that leaders should do, anyway.

After further defining leadership and innovation, this study argues that there is a positive relationship between leader-follower friendships and the innovation environment in organizations. More specifically, in organizations where there are strong leader-follower friendships, the organizational environment will be more innovative, but for those organizations that have weak leader-follower friendships, their environments will also be less innovative. The closeness of friendship can be measured by the four stages of friendship classified by Boyd and Taylor (1998): the friendship potential stage (Stage 1), exploration stage (Stage 2), casual friend stage (Stage 3), and close friend (Stage 4). The higher the stage, the closer the relationship is between the leader and followers. The innovation environment can be measured by examining those organizational factors summarized by previous studies (Bharadwaj & Menon, 2000; McLean, 2005; Van der Sluis, 2004). The hypothesis of this study is thus refined as:

Leader-follower friendship is positively related to the

measurement of innovative environment in an organization.

The closer the friendship, the more innovative the organization's environment is.

Methodology

To test the hypothesis, this study designs a survey to collect data on leader-follower

friendship and innovative environment. The survey questionnaire has 57 multiple-choice

questions (see Appendix A : Thesis Survey Questionnaire). These questions can be

divided into three main parts. Among these 57 questions, 5 questions are created to

collect the demographic information of the sample (Question 0 to Question 4); 23

questions examine the friendship in leader-follower relationships; 28 questions measure

the innovative environment in organizations; 1 question shows the followers' opinions

about the friendships with their leaders.

Among those 23 questions examining friendship, 9 questions measure the

characteristics of the leader-follower friendships in the potential stage (stage 1). Two

questions are used to measure the friendship in the exploration stage (stage 2). Four

questions measure the characteristics of the friendship in the casual friend stage (stage 3),

and eight questions are used to measure the friendship in the close friend stage (stage 4)

(see Appendix B for how those questions are grouped).

As suggested by previous studies, organizational factors determine innovation in

organizations. The survey asks about the organizational factors only. Eleven questions

measure the support of innovation at the managerial level. Two questions are asked to

measure other support. Two questions explore the work group encouragement. Six

questions are used to measure organizational encouragement. Four questions measure

supervisory encouragement and finally three questions are designed to ask about the

innovational level of the group in general (see Appendix C for how questions are

grouped).

Participants

Data was collected from employees working at a Chinese company. The company

was established in 1955. Its main products include radio, satellite devices, and televisions.

After the smooth development through decades, this company met some problems in

recent years, and innovation became particularly important. The company is composed of

three sections: management, design, and production departments. People in the

management section are responsible for office work, such as financial management and

control, sourcing and procurement, and human resource management. The design section

produces drawings for each product and sends these documents to the production

department. Then the manufacturing workers build the products according to the

drawings. There are nine different workshops in the production department; they are the

pressing, heat treatment, surface treatment, washing, cleaning, components installation,

total installation, testing & debugging, and power department workshops. Each workshop

has at least five units (or groups). Altogether, there are 756 employees in the production

department, who can be grouped into 54 teams. All of the employees in the production

department were invited to participate in this research. The survey collected employees'

perception of their friendships with their leaders, and their perception of the innovative

environments in their groups.

Procedures

Participants in this research were personally invited to participate. The author went

to the company on November 3 - 4, 2011, and visited each department. The research was

explained to the employees in each department. The employees were informed who was

conducting the research, who was paying for it, the description of the purposes of the

research, the procedures, the risks and discomforts of participating, and how the answers

would be stored and protected. Then everyone was given a consent form (see Appendix

D). Employees who read and signed the form were given the survey questionnaire and

asked to answer the questions. Their cooperation was completely voluntary. The

questionnaires were collected after the participants finished. The data was entered into the

computer, the accuracy of the entered data was confirmed, and the paper questionnaires

were destroyed.

Demographic Information of Participants

Among these 756 employees, 725, that is 96% completed the survey. Two thirds

(66.67%) of the respondents are male, and 33.24% of them are female. Three percent

(3.03 %) of the respondents are under 25 years old, and 31.31 % of them fall into the age

group of 25 to 35. The largest portion, which is 43.31 %, of them are between the ages of

36 and 45. Almost twenty-one percent (20.83 %) of the respondents are 46 to 55, and

only 1.52% of them are 56 to 65. The respondents to the surveys have different

educational backgrounds and working experiences. Less than nine percent (8.41 %) of the

725 respondents' educational level is less than high school, and 25.79 % of them are high

school graduates. 15.04 % of them went to college, but did not graduate. 26.90 % of them

have Associate's degrees, 18.76 % of them have Bachelor's degrees, and 5.10 % of them

have Master's degrees. 13.38 % of them have working experiences less than 3 years.

18.35 % of them have been working in the company 3 to 5 years; 20.41 % have been

working 6 to 10 years; 18.76 % of them have been working here 16 to 20 years, and

13.24 % of them have been working here more than 20 years (see Appendix E for

detailed demographic information).

Table 1: Demographic Information of Sample (n=725)

Gender	Male	66.76 %
	Female	33.24 %
Age	Under 25	3.03 %
	25-35	31.31 %
	36-45	43.31 %
	46-55	20.83 %
	56-65	1.52 %
Education	Less than high school	8.41 %
	High school	25.79 %
	Some college	15.04 %
	Associate's degree	26.90 %
	Bachelor's degree	18.76 %
	Master's degree	5.10 %
	P.h.D or equivalent	0.00 %
Experiences	Less than 3 years	13.38 %
	3-5 years	18.35 %
	6-10 years	20.41 %
	11-15years	18.76 %
	16-20 years	15.85 %
	More than 20 years	13.24 %

CHAPTER 4: ANALYSIS AND RESULTS

Simple correlation analysis of the survey data shows that variables measuring

friendship are highly correlated with those variables measuring innovation environment.

To catch the friendship classification created by Boyd and Taylor (1998), four friendship

indices were created. Each stage of friendship is measured by one index. The index is the

mean score of corresponding friendship variables. As expected, those four stage indices

were highly correlated with all the variables measuring the innovation environment,

except for Question 24 (see Appendix F).

To simplify the measurement of innovation environment, six innovation

environment indices were created, measuring six innovation dimensions: managerial

support, other support, group encouragement, organizational encouragement, supervisory

encouragement and general innovation environment. Those indices are average scores of

the corresponding variables measuring those dimensions. Table 2 shows that four indices

measuring friendship are strongly correlated with those innovation environment indices.

In general, stage 3 and stage 4 friendship indices correlate more strongly with innovation

indices than stage 1 and stage 2 innovation indices.

Table 2: Correlation: Friendship Stages and Innovation Dimensions

	Managerial Support	Other Support	Group Encouragement	Organizational Encouragement	Supervisory Encouragement	General
Stage1	.593	.478	.454	.557	.717	.347
Stage2	.872	.766	.764	.807	.860	.628
Stage3	.989	.970	.968	.965	.914	.903
Stage4	.920	.963	.961	.958	.885	.979

Note: all Pearson correlation coefficients are significant at the 1% level

To further test the relationship between friendship and innovation environment, regression analyses were conducted, using stage 1 and stage 4 friendship indices as independent variables and those innovation indices as dependent variables. Stage 2 and stage 3 friendship indices are not included in the regression models because the stage 2 index is highly correlated with the stage 1 index, and the stage 3 index is highly correlated with the stage 4 index. Table 3 shows the results from the regression analyses. Those two friendship indices are statistically significant in all but one regression model, and the coefficients for the stage 4 index are all larger than the coefficients for the stage 1 index in all six models. The correlation and regression analyses support the hypothesis. The friendship between leader and followers is positively associated with the innovation environment, and the closer the friendship, the more innovative the organization's environment is.

Except for organizational factors, the innovation environment in organizations should also be affected by the individual factors. However, individual factors are not as important as organizational factors, they may have some influence on the creation of innovative environment, but obviously, they are not determinants (Baldridge & Burnham, 1975; Bharadwaj & Menon, 2000). In this study, the age, education, and work experience of the employees are considered as individual factors.

In table 3, it clearly shows that the influence of the individual factors on the innovative environment is limited. Among the three individual factors, which are the employees' ages, educational background, and their work experience, the factor of age has nothing to do with the innovative environment. Education has a little more impact on the managerial support variables, when compared with other variables measuring the innovative environment. Working experience, while, is more related to the managerial support, other support, and employees' general responses variables.

Table 3: OLS Regression Models

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent Variable	Managerial Support	Other Support	Group Encouragement	Organizational Encouragement	Supervisory Encouragement	General
R Square	0.926	0.948	0.937	0.97	0.965	0.959
Independent Variable	β	β	β	β	β	β
Stage1 Friendships	0.317 ***	0.161 ***	0.136 ***	0.253 ***	0.461 ***	0.004
Stage4 Friendships	0.812 ***	0.909 ***	0.916 ***	0.87 ***	0.720 ***	0.981 ***
Age	-0.028	-0.047	-0.05	-0.025	-0.22	-0.073 **
Education	0.086 **	0.052	0.031	0.045 *	0.043	0.007
Working Experience	0.081 *	0.07 *	0.08 **	0.048 *	0.016	0.087 ***

* Significant at the 10% level; ** Significant at the 5% level; *** Significant at the 1% level

CHAPTER 5: CONCLUSION

Discussion

This study was undertaken to examine the relationship between leader-follower

friendships and the innovative environment in organizations. The questions in the survey

instrument were created based on the review of literature. The leader-follower friendships

progress four different stages of development: the friendship potential stage (Stage 1),

exploration stage (Stage 2), casual friend stage (Stage 3), and close friend stage (Stage 4),

and each stage has its own characteristics. By summarizing the characteristics of each

stage and turning them into a series of questions, the information of the leader-follower

friendships in each group was obtained through the answers provided by the employees.

Similarly, the characteristics of an innovative organization were found by reviewing the

work of Akdemir, McLean, Van der Sluis and others, and the level of the innovative

environment was measured.

Theoretically the friendships between leaders and followers in each group should be

positively related to the innovative environment in that group. This study assumes that

leader-follower friendship is positively related to the measurement of innovative

environment in an organization. The closer the friendship, the more innovative the

organization's environment is. If the hypothesis is true, the leader-follower friendships in

the fourth stage should have the most influence on the creation of the innovative

environment, on the other hand, the friendships in the first stage should have the least

influence.

Analysis of correlations between leader-follower friendships and innovative

environment indicated that these two items are highly correlated, which supports the

hypothesis. Among all the factors that measure the innovative environment, only one is

found to be not significant. This question asks the employees whether their leaders have

set clear and specific goals. The reason this happens may be that the company has policy

asking leaders in each group to set short-term goals.

Although some researchers argued that the individual factors are not determinants of

the innovative environment in organizations, the empirical analyses of this study show

that some of them have an impact. First, age is not a factor that influences the creation of

an innovative environment. Second, employees' different levels of education have a little

more influence on the managerial support variables than others. One possible explanation

of this phenomenon is that two variables that measure the employee behaviors of learning

and creating knowledge are classified into the managerial support variables, more

educated employees may be required to create more knowledge by leaders than others.

Similarly, this may also occur on the employees who have worked in the company longer

than others. Moreover, work experience also has some impact on other support, work

group encouragement, and employees' general responses variables. It is also possible

when people have worked there longer, they receive more resources and autonomy. They may also be required to communicate more with other groups than others. Finally, new employees and old employees may have different understanding of the company, which may cause different responses to the organization.

Limitations and Future Research

Basically, there are three limitations of this study. The first two limitations of this study derive from the survey design. In this study, the leader-follower friendships and innovative environment in each group were measured through the answers to the questions in the questionnaires. However, only the employees were invited to take part in the survey. The friendships between leaders and followers are only based on the followers' perceptions, but the leaders may have different feelings about their friendships with each of their followers. In order to make sure the leaders' perceptions also match the employees' perceptions, future studies, such as creating a questionnaire for the leaders and asking their opinions about their friendships with each group member are needed. In addition, the employees decided the level of innovative environment in their groups. Because of the differences in ages, education, and work experience among employees, their judgments on the innovative environment may also vary. In order to minimize the biases, external experts can be hired to determine the level of innovative environment in every group. Finally, there are many possible ways to achieve organizational innovation.

Creating innovative environment in organizations is only one method of improving innovation. Future studies of exploring ways to continual innovations in organizations may focus on the other methods except for creating innovative environment.

Implications for Practice

The results of this study show that the friendships between leaders and followers in organizations are positively related to the creation of innovative environment. As an effective way to improve innovation and group performance, creating innovative environment can be utilized by leaders through establishing friendships with their followers. Boyd and Taylor mentioned that in organizations or countries where the power distance is small, the friendships between leaders and followers are more likely to occur. In order to develop the friendships with followers, leaders should always try to reduce and minimize the power distance in their organizations. Moreover, Boyd and Taylor also claimed that transformational leaders, other than transactional leaders, would like to develop friendships with employees. Leaders who are considered as "transformational" always create attractive visions of the future, and explain them to followers; they serve as models for their followers, and also support, encourage, coach, and serve as models for their subordinates.

For organizations, this study provide them with a new criteria of recruiting and promoting processes, which makes leaders with excellent internal social networks stand

out above the rest. Moreover, since close leader-follower friendships so important as to

improve organizational innovation and performance, organizations may find out a new

focus on training leaders.

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Appendix A: Thesis Survey Questionnaire

Please select the answer that best suits you.

0. In which unit do you work?
   [ ] Pressing Workshop: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6
   [ ] Heat Treatment Workshop: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5
   [ ] Surface Treatment Workshop: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6   [ ] 7
   [ ] Washing Workshop: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6
   [ ] Cleaning Workshop: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6
   [ ] Components Installation Workshop: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6
   [ ] Total Installation Workshop: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6
   [ ] Testing & Debugging Workshop: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5
   [ ] Power Department: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6   [ ] 7

1. What is your sex?
   [ ] Male
   [ ] Female

2. How old are you?
   [ ] Under 25
   [ ] 25-35
   [ ] 36-45
   [ ] 46-55
   [ ] 56-65

3. What is the highest level of education you have completed?
   [ ] Less than high school
   [ ] High school
   [ ] Some college
   [ ] Associate's degree
   [ ] Bachelor's degree
   [ ] Master's degree
   [ ] Ph.D. or equivalent

4. How long have you been working in the Liaoyuan Electronics Co.Ltd.?

    [ ] Less than 3 years

    [ ] 3-5 years

    [ ] 6-10 years

    [ ] 11-15 years

    [ ] 16-20 years

    [ ] more than 20 years

5. Do you work in the same office with your leader?

    [ ] Yes

    [ ] No

6. In your opinion, how close is the friendship between your and the department leader?

    [ ] Not close at all

    [ ] Somewhat close

    [ ] Close

    [ ] Very close

For the following questions, indicate your opinions by check the box corresponding to your answers.

Do you agree or disagree with the following statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
7. My leader shares the same basic attitudes toward my job as I do. For example, both my leader and I agree on the importance of my job.					
8. My leader shares the same basic attitudes toward our department as I do. For example, both my leader and I agree that we should initiate a collaborative effort or be independent from other departments.					
9. The contact between my leader and me occurs frequently by telephone.					
10. The contact between my leader and me occurs frequently by direct face-to-face communication.					
11. When I want to talk with my leader, I have to make an appointment first.					

Do you agree or disagree with the following statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
12. I am allowed to reach my leader directly if I want to talk with him/her or I can just dial his/her number.					
13. I will follow my leader and choose not to express my opinions even though I have some doubts and disagreements with him/her.					
14. I am viewed as an "associate" rather than "employee" to my leader.					
15. Both my leader and I believe that the rewards obtained in our interaction are greater than the costs.					
16. My leader and agree on some issues, such as, both of us agree on the general modes of behavior that workers should exhibit at work.					
17. Instead of just being a good listener in our friendship, I also give advice to my leader at a personal, as well as professional, level.					
18. My leader and I both receive emotional support from each other.					
19. My leader inspires and motivates me all the time.					
20. My leader is very attentive to my concerns and needs.					
21. My leader serves as a model of hard work.					
22. My leader serves as demonstration of ethical standards.					
23. My leader coaches me during work.					
24. My leader has set clear and specific goals.					
25. My leader has set expectations for how goals are accomplished.					
26. My leader believes that creativity and innovation are very important for our department.					

Do you agree or disagree with the following statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
27. My leader encourages me to view problems from different perspectives.					
28. My leader provides task support when I encounter problems at work.					
29. In our department, I am allowed to determine the means by which to achieve goals.					
30. If I have a new idea about my work, I will be given enough resources of both time and money to develop and test it.					
31. The leader of my department encourages an open flow of communication with other departments.					
32. There is a formal and effective incentive system in my department to encourage new ideas.					
33. I am allowed and encouraged to participate in the management and decision-making progress of my department.					
34. When I come up with new ideas, my leader helps me develop and evaluate ideas.					
35. My leader recognizes my exceptional accomplishment and rewards it.					
36. My leader encourages people from different cities to work together.					
37. My leader encourages people of all ages to work together.					
38. My leader attaches great significance to the introduction of new technology and equipment.					
39. I am provided with training and professional development opportunities in my department.					

Do you agree or disagree with the following statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
40. My leader encourages me to learn.					
41. My leader encourages me to create new knowledge.					
42. My leader is willing to learn.					
43. My leader is willing to create new knowledge.					
44. My department shows a great desire for change.					
45. My department responds to change.					
46. My department anticipates the need to change.					
47. My leader considers innovation as one of the determinants of success.					
48. My leader encourages me to generate new ideas during my work time.					
49. My leader allocates funds for new equipment.					
50. My leader allocates funds for accelerating technological upgrading.					

	Never	Seldom	Part of the time	Most of the time	All of the time
51. How often are you consulted by your leader in his/her decisions?					
52. How often does your leader attribute your exceptional performance to internal causes, such as your effort and ability?					
53. How often does your leader attribute your poor performance to external causes, such as the lack of resources?					
54. How often does your leader attribute your exceptional performance to external causes, for example, your leader thinks your exceptional performance is because of the external assistance?					
55. How often does your leader attribute your poor performance to internal causes, for example, your leader believes you are not working hard, or you do not have the ability for the task?					
56. How often does your leader replace the old version of manuals and policies with a new version that is well-understood and described in details?					

Appendix B: Descriptive Statistics of Questions on Leader-Follower Friendships

Friendship Potential Stage (Stage 1)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My leader shares the same basic attitudes toward my job as I do. For example, both my leader and I agree on the importance of my job. (Q7)	0.00 %	3.03 %	5.38 %	50.21 %	41.38 %
My leader shares the same basic attitudes toward our department as I do. For example, both my leader and I agree that we should initiate a collaborative effort or be independent from other departments. (Q8)	0.00 %	3.59 %	3.72 %	48.69 %	44.00 %
The contact between my leader and me occurs frequently by telephone. (Q9)	45.66 %	54.07 %	0.28 %	0.00 %	0.00 %
The contact between my leader and me occurs frequently by direct face-to-face communication. (Q10)	0.00 %	0.00 %	0.00 %	49.38 %	50.62 %
When I want to talk with my leader, I have to make an appointment first. (Q11)	45.52 %	49.93 %	1.10 %	2.21 %	1.24 %
I am allowed to reach my leader directly if I want to talk with him/her or I can just dial his/her number. (Q12)	0.00 %	0.00 %	7.59 %	49.52 %	42.90 %
I will follow my leader and choose not to express my opinions even though I have some doubts and disagreements with him/her. (Q13)	15.59 %	30.90 %	19.45 %	27.17 %	6.90 %
I am viewed as an "associate" rather than "employee" to my leader. (Q14)	7.59 %	25.10 %	19.17 %	32.55 %	15.59 %
	Yes			No	
Do you work in the same office with your leader? (Q5)	100.00 %			0.00 %	

Exploration Stage (Stage 2)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Both my leader and I believe that the rewards obtained in our interaction are greater than the costs. (Q15)	7.72 %	17.24 %	14.34 %	38.07 %	22.62 %
My leader and I agree on some issues, such as, both of us agree on the general modes of behavior that workers should exhibit at work. (Q16)	6.48 %	16.55 %	15.45 %	36.28 %	25.24 %

Casual Friend Stage (Stage 3)

	Never	Seldom	Part of the time	Most of the time	All of the time
How often does your leader attribute your exceptional performance to internal causes, such as your effort and ability? (Q52)	17.93 %	32.97 %	18.48 %	19.31 %	11.31 %
How often does your leader attribute your poor performance to external causes, such as the lack of resources? (Q53)	16.41 %	35.45 %	22.90 %	17.52 %	7.72 %
How often does your leader attribute your exceptional performance to external causes, for example, your leader thinks your exceptional performance is because of the external assistance? (Q54)	12.00 %	22.34 %	14.62 %	23.86 %	27.17 %
How often does your leader attribute your poor performance to internal causes, for example, your leader believes you are not working hard, or you do not have the ability for the task? (Q55)	8.55 %	20.41 %	20.00 %	22.76 %	28.28 %

Close Friend (Stage 4)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Instead of just being a good listener in our friendship, I also give advice to my leader at a personal, as well as professional, level. (Q17)	17.93 %	30.62 %	30.21 %	15.31 %	5.93 %
My leader and I both receive emotional support from each other. (Q18)	19.72 %	35.31 %	25.24 %	13.79 %	5.93 %
My leader inspires and motivates me all the time. (Q19)	18.90 %	36.97 %	24.83 %	14.62 %	4.69 %
My leader is very attentive to my concerns and needs. (Q20)	18.62 %	36.41 %	25.24 %	15.03 %	4.69 %
My leader serves as a model of hard work. (Q21)	17.93 %	37.24 %	25.38 %	15.17 %	4.28 %
My leader serves as demonstration of ethical standards. (Q22)	18.76 %	39.03 %	22.21 %	16.14 %	3.86 %
My leader coaches me during work. (Q23)	17.66 %	32.83 %	30.90 %	14.07 %	4.55 %
My leader encourages me to view problems from different perspectives. (Q27)	21.10 %	29.79 %	26.07 %	13.52 %	9.52 %

Appendix C: Descriptive Statistics of Questions on Innovative Environment

Managerial Support for Innovative Environment

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My leader believes that creativity and innovation are very important for our department. (Q26)	7.17 %	18.21 %	34.34 %	30.07 %	10.21 %
My leader attaches great significance to the introduction of new technology and equipment. (Q38)	17.93 %	33.79 %	21.66 %	20.41 %	6.21 %
I am provided with training and professional development opportunities in my department. (Q39)	14.48 %	27.59 %	29.38 %	22.76 %	5.79 %
My leader encourages me to learn. (Q40)	0.00 %	19.45 %	19.86 %	39.31 %	21.38 %
My leader encourages me to create new knowledge. (Q41)	12.14 %	23.59 %	27.59 %	27.17 %	9.52 %
My leader is willing to learn. (Q42)	0.00 %	19.31 %	20.69 %	39.03 %	20.97 %
My leader is willing to create new knowledge. (Q43)	12.00 %	23.86 %	27.03 %	28.97 %	8.14 %
My leader considers innovation as one of the determinants of success. (Q47)	12.69 %	24.55 %	25.93 %	29.10 %	7.72 %
My leader allocates funds for new equipment. (Q49)	11.72 %	25.38 %	27.03 %	27.17 %	8.69 %
My leader allocates funds for accelerating technological upgrading. (Q50)	11.17 %	27.72 %	28.14 %	26.21 %	6.76 %
	Never	Seldom	Part of the time	Most of the time	All of the time
How often does your leader replace the old version of manuals and policies with a new version that is well-understood and described in details? (Q56)	13.52 %	30.62 %	36.41 %	12.69 %	6.76 %

Other support for Innovative Environment

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
In our department, I am allowed to determine the means by which to achieve goals. (Q29)	19.59 %	33.52 %	22.21 %	18.48 %	6.21 %
If I have a new idea about my work, I will be given enough resources of both time and money to develop and test it. (Q30)	18.21 %	35.31 %	21.38 %	20.28 %	4.83 %

Group Encouragement for Innovative Environment

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My leader encourages people from different cities to work together. (Q36)	16.69 %	36.14 %	21.93 %	19.03 %	6.21 %
My leader encourages people of all ages to work together. (Q37)	16.97 %	35.59 %	23.03 %	18.48 %	5.93 %

Supervisory Encouragement for Innovative Environment

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My leader has set clear and specific goals. (Q24)	0.00 %	0.14 %	0.97 %	51.45 %	47.45 %
My leader has set expectations for how goals are accomplished. (Q25)	0.00 %	6.21 %	10.07%	41.24 %	42.48 %
My leader provides task support when I encounter problems at work. (Q28)	14.21 %	26.48 %	29.79 %	22.34 %	7.17 %
My leader recognizes my exceptional accomplishment and rewards it. (Q35)	18.21 %	33.79 %	22.34 %	20.14 %	5.52 %

Organizational Encouragement for Innovative Environment

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The leader of my department encourages an open flow of communication with other departments. (Q31)	17.24 %	34.34 %	23.03 %	19.72 %	5.66 %
There is a formal and effective incentive system in my department to encourage new ideas. (Q32)	17.38 %	34.21 %	23.59 %	20.28 %	4.55 %
I am allowed and encouraged to participate in the management and decision-making progress of my department. (Q33)	17.24 %	34.21 %	22.76 %	18.62 %	7.17 %
When I come up with new ideas, my leader helps me develop and evaluate ideas. (Q34)	16.14 %	26.48 %	28.41 %	22.76 %	6.21 %
My leader encourages me to generate new ideas during my work time. (Q48)	11.72 %	25.79 %	28.55 %	26.21 %	7.72 %
	Never	Seldom	Part of the time	Most of the time	All of the time
How often are you consulted by your leader in his/her decisions? (Q51)	13.52 %	36.69 %	34.21 %	11.03 %	4.55 %

Followers' general responses to the innovation

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My department shows a great desire for change. (Q44)	15.72 %	25.93 %	29.52 %	18.76 %	10.07 %
My department responds to change.(Q45)	20.28 %	31.03 %	25.66 %	16.97 %	6.07 %
My department anticipate the need to change.(Q46)	23.59 %	34.07 %	23.59%	13.38 %	5.38 %

Appendix D: Consent Form

Consent to Participate in Research

You are invited to participate in a study of Chinese leadership. This study is an important part of the thesis of a graduate student at Fort Hays State University. Please read the information below, before agreeing to participate in the research.

Purposes

The purpose of this study is to obtain more information about how the leader-follower friendships relate to innovative environment in a Chinese company. Specifically, through this survey, we hope to understand how leader-follower friendship affects the creation of innovative groups in a company.

Procedures

If you agree to participate, you will be asked to fill out a six page questionnaire. It should take about 20 minutes of your time.

Risks and Discomforts

There is no known risk or discomfort in participating in this study. This survey is anonymous. Please DO NOT write your name on the questionnaire. Because this survey is aimed at examining the relationship between leader-follower friendship and an innovative group environment, you are asked to indicate which group you are in. However, the information will not be shared with anyone else without your permission. You may refuse to answer any questions in the survey, or stop participating at any time, for any reason.

Benefits

You may receive no compensation or direct benefits from taking part in this research. The findings derived from this research may help leaders in China to improve subordinate performances by deciding whether to develop friendships with their subordinates.

Confidentiality

The survey does not ask information that would identify an individual, such as name, phone number, or address. Any information you provide will remain confidential. The surveys will be kept in locked files and are not accessible to non-project members.

Participation and Withdrawal

Your decision to take part in this research is entirely VOLUNTARY. Your life will not be adversely affected in any way by whether to participate. If you choose not to participate, it will not affect your current and future relationship with your leader and your organization. You are free to withdraw from this survey at any time, even if you sign the form.

Contact

If you have any questions or concerns about this research, please feel free to contact the principle investigator of this research, Xiaojuan Xia by phone, mail, or e-mail. Her contact information is: 316 W 6th ST Apt.4; Hays, Kansas 67601; 1-316-518-8923; x_xia3_sia@scatcat.fhsu.edu.

Consent

I have read the information provided above, and fully understand it. I have been given the opportunity to ask questions, and my questions have been answered to my satisfaction. I have been given a copy of this consent form, and I agree to participate in this research.

_____

Signature of Research Subjects

_____

Date

In my judgment the subject is voluntarily and knowingly giving informed consent to participate in this study.

_____

Signature of Investigator

_____

Date

Appendix E: Demographic Information (Gender, Age, Education, and Experiences)

Gender

Team	Male	Female
A1 (n=14)	78.57 %	21.43 %
A2 (n=14)	85.71 %	14.29 %
A3 (n=14)	85.71 %	14.29 %
A4 (n=12)	83.33 %	16.67 %
A5 (n=14)	92.86 %	7.14 %
A6 (n=13)	69.23 %	30.77 %
B1 (n=14)	71.43 %	28.57 %
B2 (n=12)	58.33 %	41.67 %
B3 (n=13)	84.62 %	15.38 %
B4 (n=14)	64.29 %	35.71 %
B5 (n=14)	50.00 %	50.00 %
C1 (n=12)	66.67 %	33.33 %
C2 (n=14)	78.57 %	21.43 %
C3 (n=14)	35.71 %	64.29 %
C4 (n=12)	66.67 %	33.33 %
C5 (n=14)	71.43 %	28.57 %
C6 (n=14)	78.57 %	21.43 %
C7 (n=12)	83.33 %	16.67 %
D1 (n=13)	69.23 %	30.77 %
D2 (n=14)	85.71 %	14.29 %
D3 (n=14)	78.57 %	21.43 %
D4 (n=14)	71.43 %	28.57 %
D5 (n=14)	78.57 %	21.43 %
D6 (n=13)	61.54 %	38.46 %
E1 (n=14)	71.43 %	28.57 %
E2 (n=14)	71.43 %	28.57 %
E3 (n=13)	53.85 %	46.15 %
E4 (n=14)	71.43 %	28.57 %
E5 (n=14)	78.57 %	21.43 %
E6 (n=14)	78.57 %	21.43 %

Gender - (continued)

Team	Male	Female
F1 (n=11)	72.73 %	27.27 %
F2 (n=14)	78.57 %	21.43 %
F3 (n=14)	64.29 %	35.71 %
F4 (n=14)	78.57 %	21.43 %
F5 (n=14)	57.14 %	42.86 %
F6 (n=13)	69.23 %	30.77 %
G1 (n=14)	50.00 %	50.00 %
G2 (n=14)	50.00 %	50.00 %
G3 (n=12)	33.33 %	66.67 %
G4 (n=14)	28.57 %	71.43 %
G5 (n=14)	35.71 %	64.29 %
G6 (n=12)	50.00 %	50.00 %
H1 (n=13)	30.77 %	69.23 %
H2 (n=14)	50.00 %	50.00 %
H3 (n=14)	50.00 %	50.00 %
H4 (n=13)	76.92 %	23.08 %
H5 (n=14)	71.43 %	28.57 %
I1 (n=14)	71.43 %	28.57 %
I2 (n=12)	83.33 %	16.67 %
I3 (n=14)	64.29 %	35.71 %
I4 (n=12)	58.33 %	41.67 %
I5 (n=14)	57.14 %	42.86 %
I6 (n=14)	78.57 %	21.43 %
I7 (n=12)	66.67 %	33.33 %
Total (n=725)	66.76 %	33.24 %

Age

Team	Under 25	25-35	36-45	46-55	56-65
A1 (n=14)	14.29 %	0.00 %	35.71 %	35.71 %	14.29%
A2 (n=14)	0.00 %	35.71 %	50.00 %	14.29 %	0.00 %
A3 (n=14)	0.00 %	35.71 %	42.86 %	21.43 %	0.00 %
A4 (n=12)	0.00 %	33.33 %	33.33 %	33.33 %	0.00 %
A5 (n=14)	14.29 %	28.57 %	42.86 %	14.29 %	0.00 %
A6 (n=13)	0.00 %	30.77 %	46.15 %	23.08 %	0.00 %
B1 (n=14)	0.00 %	21.43 %	71.43 %	7.14 %	0.00 %
B2 (n=12)	8.33 %	33.33 %	33.33 %	25.00 %	0.00 %
B3 (n=13)	0.00 %	15.38 %	30.77 %	53.85 %	0.00 %
B4 (n=14)	0.00 %	28.57 %	21.43 %	50.00 %	0.00 %
B5 (n=14)	0.00 %	14.29 %	57.14 %	21.43 %	7.14 %
C1 (n=12)	0.00 %	0.00 %	66.67 %	33.33 %	0.00 %
C2 (n=14)	0.00 %	14.29 %	64.29 %	21.43 %	0.00 %
C3 (n=14)	0.00 %	28.57 %	42.86 %	21.43 %	7.14 %
C4 (n=12)	16.67 %	16.67 %	41.67 %	16.67 %	8.33 %
C5 (n=14)	7.14 %	50.00 %	35.71 %	7.14 %	0.00 %
C6 (n=14)	0.00 %	57.14 %	35.71 %	7.14 %	0.00 %
C7 (n=12)	0.00 %	16.67 %	50.00 %	25.00 %	8.33 %
D1 (n=13)	0.00 %	46.15 %	30.77 %	15.38 %	7.69 %
D2 (n=14)	0.00 %	35.71 %	42.86 %	21.43 %	0.00 %
D3 (n=14)	0.00 %	28.57 %	35.71 %	28.57 %	7.14 %
D4 (n=14)	0.00 %	21.43 %	57.14 %	21.43 %	0.00 %
D5 (n=14)	0.00 %	21.43 %	21.43 %	50.00 %	7.14 %
D6 (n=13)	0.00 %	15.38 %	61.54 %	23.08 %	0.00 %
E1 (n=14)	7.14 %	28.57 %	28.57 %	35.71 %	0.00 %
E2 (n=14)	0.00 %	28.57 %	35.71 %	35.71 %	0.00 %
E3 (n=13)	38.46%	15.38 %	15.38 %	30.77 %	0.00 %
E4 (n=14)	0.00 %	50.00 %	21.43 %	21.43 %	7.14 %
E5 (n=14)	0.00 %	35.71 %	50.00 %	14.29 %	0.00 %
E6 (n=14)	0.00 %	14.29 %	64.29 %	21.43 %	0.00 %

Age - (continued)

Team	Under 25	25-35	36-45	46-55	56-65
F1 (n=11)	0.00 %	9.09 %	45.45 %	36.36 %	9.09 %
F2 (n=14)	0.00 %	35.71 %	42.86 %	21.43 %	0.00 %
F3 (n=14)	0.00 %	14.29 %	64.29 %	21.43 %	0.00 %
F4 (n=14)	0.00 %	28.57 %	42.86 %	28.57 %	0.00 %
F5 (n=14)	0.00 %	42.86 %	35.71 %	21.43 %	0.00 %
F6 (n=13)	7.69 %	53.85 %	38.46%	0.00 %	0.00 %
G1 (n=14)	0.00 %	35.71 %	50.00 %	14.29 %	0.00 %
G2 (n=14)	0.00 %	50.00 %	35.71 %	14.29 %	0.00 %
G3 (n=12)	0.00 %	33.33 %	66.67 %	0.00 %	0.00 %
G4 (n=14)	7.14 %	35.71 %	57.14 %	0.00 %	0.00 %
G5 (n=14)	7.14 %	50.00 %	35.71 %	7.14 %	0.00 %
G6 (n=12)	0.00 %	33.33 %	58.33 %	8.33 %	0.00 %
H1 (n=13)	0.00 %	46.15 %	46.15 %	7.69 %	0.00 %
H2 (n=14)	7.14 %	21.43 %	42.86 %	28.57 %	0.00 %
H3 (n=14)	0.00 %	57.14 %	21.43 %	21.43 %	0.00 %
H4 (n=13)	15.38 %	38.46%	38.46%	7.69 %	0.00 %
H5 (n=14)	7.14 %	42.86 %	35.71 %	14.29 %	0.00 %
I1 (n=14)	0.00 %	42.86 %	42.86 %	14.29 %	0.00 %
I2 (n=12)	0.00 %	8.33 %	58.33 %	33.33 %	0.00 %
I3 (n=14)	0.00 %	21.43 %	64.29 %	14.29 %	0.00 %
I4 (n=12)	0.00 %	16.67 %	66.67 %	16.67 %	0.00 %
I5 (n=14)	7.14 %	64.29 %	21.43 %	7.14 %	0.00 %
I6 (n=14)	0.00 %	42.86 %	35.71 %	21.43 %	0.00 %
I7 (n=12)	0.00 %	50.00 %	33.33 %	16.67 %	0.00 %
Total (n=725)	3.03 %	31.31 %	43.31 %	20.83 %	1.52 %

Education

Team	Less than High School	High School	Some College	Associate's Degree	Bachelor's Degree	Mater's Degree	Ph.D. or Equivalent
A1 (n=14)	14.29 %	35.71 %	14.29 %	35.71 %	0.00 %	0.00 %	0.00 %
A2 (n=14)	7.14 %	28.57 %	14.29 %	21.43 %	28.57 %	0.00 %	0.00 %
A3 (n=14)	7.14 %	28.57 %	14.29 %	14.29 %	28.57 %	7.14 %	0.00 %
A4 (n=12)	8.33 %	8.33 %	16.67 %	41.67 %	25.00 %	0.00 %	0.00 %
A5 (n=14)	7.14 %	42.86 %	0.00 %	14.29 %	21.43 %	14.29 %	0.00 %
A6 (n=13)	7.69 %	15.38 %	23.08 %	23.08 %	23.08 %	7.69 %	0.00 %
B1 (n=14)	7.14 %	28.57 %	7.14 %	21.43 %	28.57 %	7.14 %	0.00 %
B2 (n=12)	16.67 %	33.33 %	0.00 %	33.33 %	16.67 %	0.00 %	0.00 %
B3 (n=13)	7.69 %	23.08 %	15.38 %	23.08 %	23.08 %	7.69 %	0.00 %
B4 (n=14)	14.29 %	21.43 %	21.43 %	21.43 %	21.43 %	0.00 %	0.00 %
B5 (n=14)	14.29 %	21.43 %	14.29 %	21.43 %	28.57 %	0.00 %	0.00 %
C1 (n=12)	8.33 %	41.67 %	16.67 %	25.00 %	8.33 %	0.00 %	0.00 %
C2 (n=14)	7.14 %	35.71 %	14.29 %	14.29 %	28.57 %	0.00 %	0.00 %
C3 (n=14)	21.43 %	28.57 %	14.29 %	21.43 %	7.14 %	7.14 %	0.00 %
C4 (n=12)	8.33 %	25.00 %	8.33 %	41.67 %	16.67 %	0.00 %	0.00 %
C5 (n=14)	14.29 %	14.29 %	14.29 %	21.43 %	35.71 %	0.00 %	0.00 %
C6 (n=14)	0.00 %	21.43 %	21.43 %	14.29 %	42.86 %	0.00 %	0.00 %
C7 (n=12)	8.33 %	16.67 %	16.67 %	41.67 %	16.67 %	0.00 %	0.00 %
D1 (n=13)	7.69 %	30.77 %	23.08 %	7.69 %	15.38 %	15.38 %	0.00 %
D2 (n=14)	7.14 %	14.29 %	14.29 %	42.86 %	14.29 %	7.14 %	0.00 %
D3 (n=14)	7.14 %	28.57 %	14.29 %	28.57 %	7.14 %	14.29 %	0.00 %
D4 (n=14)	0.00 %	35.71 %	21.43 %	28.57 %	7.14 %	7.14 %	0.00 %
D5 (n=14)	14.29 %	21.43 %	21.43 %	21.43 %	14.29 %	7.14 %	0.00 %
D6 (n=13)	0.00 %	15.38 %	15.38 %	30.77 %	30.77 %	7.69 %	0.00 %
E1 (n=14)	7.14 %	21.43 %	21.43 %	28.57 %	14.29 %	7.14 %	0.00 %
E2 (n=14)	7.14 %	21.43 %	21.43 %	28.57 %	21.43 %	0.00 %	0.00 %
E3 (n=13)	7.69 %	38.46%	7.69 %	30.77 %	7.69 %	7.69 %	0.00 %
E4 (n=14)	7.14 %	14.29 %	21.43 %	28.57 %	14.29 %	14.29 %	0.00 %
E5 (n=14)	7.14 %	28.57 %	7.14 %	28.57 %	21.43 %	7.14 %	0.00 %
E6 (n=14)	14.29 %	21.43 %	28.57 %	21.43 %	14.29 %	0.00 %	0.00 %

Education - (continued)

Team	Less than High School	High School	Some College	Associate's Degree	Bachelor's Degree	Mater's Degree	Ph.D. or Equivalent
F1 (n=11)	18.18 %	36.36 %	9.09 %	27.27 %	9.09 %	0.00 %	0.00 %
F2 (n=14)	7.14 %	14.29 %	14.29 %	28.57 %	28.57 %	7.14 %	0.00 %
F3 (n=14)	14.29 %	28.57 %	28.57 %	21.43 %	7.14 %	0.00 %	0.00 %
F4 (n=14)	0.00 %	28.57 %	14.29 %	28.57 %	21.43 %	7.14 %	0.00 %
F5 (n=14)	7.14 %	14.29 %	28.57 %	14.29 %	35.71 %	0.00 %	0.00 %
F6 (n=13)	7.69 %	23.08 %	15.38 %	23.08 %	15.38 %	15.38 %	0.00 %
G1 (n=14)	0.00 %	35.71 %	14.29 %	28.57 %	21.43 %	0.00 %	0.00 %
G2 (n=14)	14.29 %	21.43 %	14.29 %	28.57 %	7.14 %	14.29 %	0.00 %
G3 (n=12)	8.33 %	16.67 %	25.00 %	33.33 %	16.67 %	0.00 %	0.00 %
G4 (n=14)	21.43 %	14.29 %	7.14 %	42.86 %	14.29 %	0.00 %	0.00 %
G5 (n=14)	7.14 %	35.71 %	0.00 %	14.29 %	28.57 %	14.29 %	0.00 %
G6 (n=12)	8.33 %	33.33 %	8.33 %	41.67 %	8.33 %	0.00 %	0.00 %
H1 (n=13)	7.69 %	23.08 %	7.69 %	23.08 %	23.08 %	15.38 %	0.00 %
H2 (n=14)	7.14 %	28.57 %	21.43 %	35.71 %	7.14 %	0.00 %	0.00 %
H3 (n=14)	0.00 %	28.57 %	21.43 %	28.57 %	14.29 %	7.14 %	0.00 %
H4 (n=13)	0.00 %	23.08 %	7.69 %	38.46%	30.77 %	0.00 %	0.00 %
H5 (n=14)	7.14 %	21.43 %	7.14 %	35.71 %	28.57 %	0.00 %	0.00 %
I1 (n=14)	7.14 %	21.43 %	7.14 %	35.71 %	21.43 %	7.14 %	0.00 %
I2 (n=12)	8.33 %	33.33 %	16.67 %	16.67 %	16.67 %	8.33 %	0.00 %
I3 (n=14)	0.00 %	42.86 %	14.29 %	28.57 %	7.14 %	7.14 %	0.00 %
I4 (n=12)	16.67 %	25.00 %	0.00 %	41.67 %	16.67 %	0.00 %	0.00 %
I5 (n=14)	0.00 %	21.43 %	28.57 %	28.57 %	14.29 %	7.14 %	0.00 %
I6 (n=14)	14.29 %	35.71 %	21.43 %	14.29 %	14.29 %	0.00 %	0.00 %
I7 (n=12)	8.33 %	25.00 %	8.33 %	25.00 %	16.67 %	16.67 %	0.00 %
Total (n=725)	8.41 %	25.79 %	15.04 %	26.90 %	18.76 %	5.10 %	0.00 %

Experiences

Team	Less than 3 years	3-5 years	6-10 years	11-15 years	16-20 years	More than 20 years
A1 (n=14)	7.14 %	7.14 %	14.29 %	21.43 %	14.29 %	35.71 %
A2 (n=14)	7.14 %	28.57 %	7.14 %	14.29 %	28.57 %	14.29 %
A3 (n=14)	14.29 %	21.43 %	42.86 %	7.14 %	0.00 %	14.29 %
A4 (n=12)	16.67 %	16.67 %	16.67 %	8.33 %	25.00 %	16.67 %
A5 (n=14)	35.71 %	28.57 %	7.14 %	14.29 %	0.00 %	14.29 %
A6 (n=13)	7.69 %	38.46%	15.38 %	23.08 %	7.69 %	7.69 %
B1 (n=14)	7.14 %	35.71 %	42.86 %	0.00 %	7.14 %	7.14 %
B2 (n=12)	8.33 %	33.33 %	16.67 %	16.67 %	0.00 %	25.00 %
B3 (n=13)	7.69 %	15.38 %	15.38 %	23.08 %	15.38 %	23.08 %
B4 (n=14)	14.29 %	14.29 %	21.43 %	14.29 %	14.29 %	21.43 %
B5 (n=14)	0.00 %	21.43 %	21.43 %	35.71 %	0.00 %	21.43 %
C1 (n=12)	8.33 %	0.00 %	25.00 %	33.33 %	25.00 %	8.33 %
C2 (n=14)	21.43 %	14.29 %	28.57 %	21.43 %	14.29 %	0.00 %
C3 (n=14)	21.43 %	28.57 %	14.29 %	14.29 %	0.00 %	21.43 %
C4 (n=12)	25.00 %	8.33 %	33.33 %	8.33 %	0.00 %	25.00 %
C5 (n=14)	21.43 %	35.71 %	7.14 %	21.43 %	0.00 %	14.29 %
C6 (n=14)	14.29 %	21.43 %	21.43 %	35.71 %	7.14 %	0.00 %
C7 (n=12)	16.67 %	8.33 %	33.33 %	16.67 %	8.33 %	16.67 %
D1 (n=13)	15.38 %	23.08 %	30.77 %	23.08 %	7.69 %	0.00 %
D2 (n=14)	7.14 %	42.86 %	21.43 %	14.29 %	7.14 %	7.14 %
D3 (n=14)	14.29 %	14.29 %	7.14 %	28.57 %	28.57 %	7.14 %
D4 (n=14)	14.29 %	14.29 %	28.57 %	21.43 %	7.14 %	14.29 %
D5 (n=14)	0.00 %	14.29 %	28.57 %	14.29 %	28.57 %	14.29 %
D6 (n=13)	0.00 %	23.08 %	15.38 %	46.15 %	15.38 %	0.00 %
E1 (n=14)	21.43 %	14.29 %	28.57 %	7.14 %	14.29 %	14.29 %
E2 (n=14)	14.29 %	7.14 %	21.43 %	7.14 %	28.57 %	21.43 %
E3 (n=13)	53.85 %	0.00 %	7.69 %	7.69 %	15.38 %	15.38 %
E4 (n=14)	7.14 %	28.57 %	14.29 %	21.43 %	7.14 %	21.43 %
E5 (n=14)	14.29 %	28.57 %	14.29 %	21.43 %	14.29 %	7.14 %
E6 (n=14)	14.29 %	35.71 %	14.29 %	7.14 %	21.43 %	7.14 %

Experiences - (continued)

Team	Less than 3 years	3-5 years	6-10 years	11-15 years	16-20 years	More than 20 years
F1 (n=11)	18.18 %	0.00 %	36.36 %	9.09 %	0.00 %	36.36 %
F2 (n=14)	14.29 %	28.57 %	42.86 %	7.14 %	7.14 %	0.00 %
F3 (n=14)	7.14 %	14.29 %	21.43 %	21.43 %	28.57 %	7.14 %
F4 (n=14)	7.14 %	14.29 %	7.14 %	28.57 %	14.29 %	28.57 %
F5 (n=14)	14.29 %	14.29 %	21.43 %	21.43 %	14.29 %	14.29 %
F6 (n=13)	23.08 %	15.38 %	30.77 %	7.69 %	15.38 %	7.69 %
G1 (n=14)	0.00 %	21.43 %	28.57 %	21.43 %	14.29 %	14.29 %
G2 (n=14)	7.14 %	21.43 %	28.57 %	21.43 %	7.14 %	14.29 %
G3 (n=12)	16.67 %	8.33 %	25.00 %	16.67 %	33.33 %	0.00 %
G4 (n=14)	7.14 %	21.43 %	14.29 %	28.57 %	21.43 %	7.14 %
G5 (n=14)	7.14 %	14.29 %	28.57 %	21.43 %	28.57 %	0.00 %
G6 (n=12)	8.33 %	16.67 %	8.33 %	25.00 %	25.00 %	16.67 %
H1 (n=13)	15.38 %	23.08 %	30.77 %	15.38 %	7.69 %	7.69 %
H2 (n=14)	21.43 %	7.14 %	14.29 %	14.29 %	21.43 %	21.43 %
H3 (n=14)	7.14 %	14.29 %	21.43 %	21.43 %	14.29 %	21.43 %
H4 (n=13)	15.38 %	15.38 %	0.00 %	23.08 %	30.77 %	15.38 %
H5 (n=14)	7.14 %	21.43 %	21.43 %	14.29 %	21.43 %	14.29 %
I1 (n=14)	7.14 %	7.14 %	14.29 %	42.86 %	21.43 %	7.14 %
I2 (n=12)	8.33 %	8.33 %	0.00 %	8.33 %	50.00 %	25.00 %
I3 (n=14)	7.14 %	21.43 %	7.14 %	28.57 %	28.57 %	7.14 %
I4 (n=12)	16.67 %	0.00 %	33.33 %	16.67 %	16.67 %	16.67 %
I5 (n=14)	14.29 %	14.29 %	42.86 %	7.14 %	14.29 %	7.14 %
I6 (n=14)	28.57 %	14.29 %	0.00 %	7.14 %	42.86 %	7.14 %
I7 (n=12)	16.67 %	16.67 %	8.33 %	33.33 %	16.67 %	8.33 %
Total (n=725)	13.38 %	18.35 %	20.41 %	18.76 %	15.86 %	13.24 %

Appendix F: Correlation: Friendship Stages and Innovation Dimensions

Correlations (n=54)

Variables	Stage 1	Stage 2	Stage 3	Stage 4
Q 24	-0.022	-0.132	-0.225	-0.204
Q 25	0.959**	0.799**	0.514**	0.368**
Q 26	0.685**	0.859**	0.937**	0.901**
Q 28	0.512**	0.721**	0.906**	0.947**
Q 29	0.464**	0.741**	0.952**	0.957**
Q 30	0.483**	0.780**	0.972**	0.954**
Q 31	0.483**	0.786**	0.972**	0.943**
Q 32	0.491**	0.778**	0.964**	0.952**
Q 33	0.496**	0.799**	0.973**	0.942**
Q 34	0.511**	0.727**	0.908**	0.952**
Q 35	0.467**	0.757**	0.958**	0.966**
Q 36	0.448**	0.761**	0.964**	0.947**
Q 37	0.451**	0.752**	0.951**	0.956**
Q 38	0.462**	0.764**	0.959**	0.958**
Q 39	0.533**	0.730**	0.897**	0.947**
Q 40	0.456**	0.854**	0.867**	0.614**
Q 41	0.507**	0.830**	0.970**	0.871**
Q 42	0.435**	0.812**	0.785**	0.515**
Q 43	0.464**	0.799**	0.955**	0.878**
Q 44	0.430**	0.757**	0.961**	0.944**
Q 45	0.306*	0.541**	0.833**	0.957**
Q 46	0.270*	0.523**	0.838**	0.964**
Q 47	0.619**	0.821**	0.949**	0.929**
Q 48	0.618**	0.816**	0.931**	0.921**
Q 49	0.613**	0.811**	0.937**	0.935**
Q 50	0.629**	0.830**	0.936**	0.922**
Q 51	0.656**	0.818**	0.916**	0.920**
Q 56	0.600**	0.787**	0.933**	0.947**

*p < 0.05; **p < 0.01

Appendix G: Thesis Survey Questionnaire in Chinese
调查问卷问题

请选择一个最适合你的答案。

0. 你在哪个单位工作？
   [ ] 冲压工段: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6
   [ ] 热处理工段: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5
   [ ] 表面处理工段: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6   [ ] 7
   [ ] 洗工段: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6
   [ ] 清理工段: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6
   [ ] 部装工段: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6
   [ ] 总装工段: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6
   [ ] 调试工段: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5
   [ ] 动力事业部: [ ] 1   [ ] 2   [ ] 3   [ ] 4   [ ] 5   [ ] 6   [ ] 7

1. 你的性别是？
   [ ] 男性
   [ ] 女性

2. 你的年龄是？
   [ ] 25 岁以下
   [ ] 25 到 35 岁
   [ ] 36 到 45 岁
   [ ] 46 到 55 岁
   [ ] 56 到 65 岁

3. 目前，你已完成的最高教育水平？
   [ ] 低于初中教育水平
   [ ] 高中
   [ ] 上过几年大学
   [ ] 大专
   [ ] 本科
   [ ] 研究生
   [ ] 博士或相等教育水平

4. 你在燎原电子股份有限公司已经工作几年了？
[ ] 少于 3 年
[ ] 3 到 5 年
[ ] 6 到 10 年
[ ] 11 到 15 年
[ ] 16 到 20 年
[ ] 多于 20 年

5. 你是否与你的领导在同一地方工作？
[ ] 是
[ ] 否

6. 在你看来，你与你领导的朋友关系有多亲密？
[ ] 一点也不亲密
[ ] 有点亲密
[ ] 亲密
[ ] 非常亲密

对以下问题，请在对应您的答案的格子里打对号。

你是否同意以下观点	极不同意	不同意	保持中立	同意	非常同意
7. 关于我的工作，我的领导与我有着相同的看法。例如，我的领导与我在关于我工作的重要性方面，意见一致。					
8. 关于我们部门，我的领导与我有着相同的看法。 例如，我和我的领导都认为我们应该与其他部门进行部门间的合作。					
9. 我与我领导之间的联系主要是通过电话。					
10. 我与我领导之间的联系主要是通过面对面的直接交谈。					
11. 如果我想与我的领导交谈，首先，我必须预约。					

你是否同意以下观点	极不同意	不同意	保持中立	同意	非常同意
12. 如果我想与我的领导交谈,我可以直接去我领导的办公室,或者也可以直接给我领导打电话。					
13. 就算我对我的领导的指示有疑问或者不赞同,我也依然会遵循我的领导,而且不会表达我的看法。					
14. 对于我的领导来说,我更像是一个"同事"而不是一个"员工"。					
15.我和我的领导都认为,我们双方从我们的交往中获得利益比投入大。					
16. 我和我的领导在某些重要问题上有着相同的见解,例如,在员工应该在中作中做出怎样的行为表现的问题上,我们的看法是一致的。					
17. 在我与我领导的朋友关系中,我不仅仅充当的是一个倾听者的角色,我还会在个人生活和工作方面给予我领导充分的建议。					
18. 我和我的领导都能从对方那里得到精神上的支持。					
19. 我的领导总是鼓励我、支持我。					
20. 我的领导总是关心我的需要。					
21. 我的领导为勤奋工作作出了榜样。					
22. 我的领导是道德准则方面的楷模。					
23. 我的领导指导我的工作。					
24. 我的领导制定了清晰、具体的目标。					
25. 我的领导预期了这些目标应该怎样实现。					
26. 我的领导认为创造力和创新对于我们部门来说非常重要。					

你是否同意以下观点	极不同意	不同意	保持中立	同意	非常同意
27. 我的领导鼓励我从不同的角度看待问题。					
28. 如果我在工作中遇到一些困难,我的领导会提供一些技术上的支持。					
29. 在我们部门,我可以自由的选择以何种方式来完成目标。					
30. 如果我有一个关于我工作的新想法,我会被给予足够的金钱和时间去发展它、测试它。					
31. 我的领导鼓励我们部门与其他部门之间的技术交流。					
32. 在我们部门,为了鼓励新想法的产程,建立了一个正式并且有效地激励体制。					
33. 我被允许、并且总是被鼓励参与到部门的管理以及决策制定当中。					
34. 当我有了新的想法的时候,我的领导帮助我去发展它、评估它。					
35. 我的领导不仅认识到我的杰出的成就,并且嘉奖我。					
36. 我的领导鼓励来自不同城市的人在一起工作。					
37. 我的领导鼓励各个年龄层的人在一起工作。					
38. 我的领导非常重视新技术、新设备的引进。					
39. 在我的部门里,我可以获得培训以及职业发展的新机会。					

你是否同意以下观点	极不同意	不同意	保持中立	同意	非常同意
40. 我的领导总是鼓励我去学习新知识。					
41. 我的领导总是鼓励我去创造新知识。					
42. 我的领导很乐于去学习新知识。					
43. 我的领导很乐于去创造新知识。					
44. 我的部门有强烈的改变的意愿。					
45. 我们的部门会对于外部的变化作出回应。					
46. 我的部门会预见改革的新需要。					
47. 我的领导认为创新是成功的重要因素之一。					
48. 我的领导鼓励我在工作当中产生新的想法。					
49. 我的领导为引进新的设备分配资金。					
50. 我的领导为加速技术创新分配资金。					

	从不	很少	有时	大多数的时候	总是
51. 你的领导在做出决定的时候是否会询问你的意见？					
52. 你的领导是否会把你杰出的工作表现归因于你的个人原因，例如，你的成就是因为你个人的努力或者是你的个人能力？					
53. 你的领导是否会把你拙劣的工作表现归因为外部原因，例如，资源的缺乏？					
54. 你的领导是否会把你杰出的工作表现归因于外部原因，例如，你的领导会认为你的杰出的表现是因为你获得了外部的帮助？					
55. 你的领导是否会把你拙劣的工作表现归因于你的个人原因，例如，你的领导会认为是你的不努力工作或者能力不足导致了这项任务的不合格？					
56. 你的领导是否会废除旧版本的员工守则或者工作制度，取而代之的是一个浅显易懂的，条理清晰的新版本？					

Appendix H: Consent Form in Chinese

调查同意书

你被邀请参与到一项关于中国领导学方面的研究。这个调查是一个富特海斯州立大学硕士研究生毕业论文的一个重要部分。在你决定参与到这项研究之前，请仔细阅读以下信息。

研究目的
通过此次调查，我们意在获得更多的关于中国领导学的信息，包括，在中国，领导和下属的朋友关系是否影响该公司创新环境的建立。通过这次的调查，我们主要是想了解领导与下属之间朋友关系的好坏是否会影响到他们成为一个具有创新精神的组织。

调查的步骤以及过程
如果你愿意参与到这项调查当中，你会被要求填写一份调查问卷。此调查问卷共 5 页，完成这个问卷大概会花费 20 分钟。

风险以及不适
这项调查应该不会给你带来任何的风险或不适。此次调查是完全匿名的，请**不要**在问卷上写出您的名字。由于此次调查意在研究领导和下属的朋友关系会与一个创新的小组环境有着怎样的联系，你只被要求指出你在哪个小组工作。在没有你的允许下，这些信息都不会透漏给任何人。你可以无条件的拒绝回答此问卷当中的任何问题，你也可以随时停止作答。

收益
通过这个调查，你将不会获得任何直接的经济补偿或者收益。不过，通过了解此次调查的结果，中国的企业领导们可以通过是否与下属做朋友来提高他们的集体收益。

保密性
此次调查不会要求参与者提供任何有可能泄露他们身份的信息，例如，他们的名字、电话号码、或是地址。你所提供的任何信息都会被保密。非此次调查的小组成员都不被允许获知关于此次调查的任何信息。

参与及退出
此次调查是完全**自愿**的，你完全有权利选择参加或者不参加。你是否参加此次调查不会给你的生活带来任何的负面影响。如果你决定不参加，你与你领导以及组织的现在、以及将来的关系都不会受到任何的影响。甚至在你已经签署了此同意书后，你仍然可以随时决定退出。

联系方式

如果关于此项调查你还有任何问题或者疑问，请随时通过邮件、电子信、或者电话联系这个研究项目的负责人夏晓娟。她的联系方式为：地址：美国堪萨斯州海斯市 6 街西 316 号 4 号公寓，邮编：67601.（316 W 6th ST Apt.4, Hays, Kansas 67601）电话：1-316-518-8923. 电邮： x_xia3_sia@scatcat.fhsu.edu

知情同意

我已仔细阅读并且完全理解以上信息。我被给予了提问的机会，并且我也得到了满意的答案。我持有一份该调查同意书。我同意参加到此次调查当中。

_____

被调查者签名

_____

日期

我认为，该调查者是在充分了解此项调查的情况下，完全自主自愿的参与到调查当中的。

_____

调查者签名

_____

日期