UNIVERSITÉ DU QUÉBEC À RIMOUSKI

LE CONTRÔLE ET L'AUTONOMIE DANS UN CONTEXTE DE GESTION DE PROJET EN CHINE

LA PERFORMANCE DANS LES ÉQUIPES DE PROJET EN LIEN

AVEC LA PRESSION DES PAIRS

Mémoire présenté

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RÉSUMÉ

Ce mémoire s'intéresse au lien entre la performance d'une équipe de projet et la pression des pairs en Chine. La méthodologie quantitative est utilisée. Après avoir procédé à une revue de la littérature, le questionnaire de recherche est présenté ainsi que les données recueillies. Les analyses incluent des statistiques descriptives et des corrélations effectuées à l'aide du logiciel SPSS. L'analyse des résultats démontre que la pression des pairs est négativement liée à la performance individuelle et celle de l'équipe, alors que la motivation dans l'organisation peut réduire l'influence négative de la pression des pairs et promouvoir la performance individuelle et collective. De plus, la simple addition des performances individuelles n'est pas égale à la performance de l'équipe.

Mots clés : contrôle, autonomie, gestion de projet, pression des pairs, motivation, performance.

ABSTRACT

This thesis focuses on the link between performance of project team and peer pressure in project management especially in China. In order to make it, the thesis adopts quantitative methodology. After a review on previous literature, a questionnaire survey is carried out and a further statistical analysis follows on the data collected. The statistical analysis includes descriptive research and correlative research both of which are done with the help of SPSS. Based on the data collected, the subsequent analysis shows that peer pressure is negatively linked to the individual performance and team performance while proper motivation within the organization can reduce the negative affection caused by peer pressure and promotes the individual performance and team performance. In addition, the simply summing of individual performance does not equal to team performance.

Keywords: control; autonomy; project management; peer pressure; motivation; performance.

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CHAPTER 1
INTRODUCTION

Avec l'émergence et le développement rapide des formes d'organisation du travail en équipe de projet, le contrôle et l'autonomie dans ce type d'équipe devient un thème d'étude important.

Ce mémoire s'intéresse à un aspect particulier du contrôle et de l'autonomie dans les équipes de travail, soit celui de la pression des pairs. La relation entre la performance, individuelle et collective, et la pression des pairs est en effet étudiée dans les prochains chapitres. Au cœur de cette relation, la motivation, variable intermédiaire dans l'étude, est également appréhendée. L'enquête par questionnaire a été adoptée afin de mesurer le lien entre la performance individuelle et collective, la pression des pairs et la motivation dans la gestion de projet, en particulier en Chine.

Le chapitre 2 présente une revue de littérature sur les concepts à l'étude. Quant au chapitre 3, il aborde le cadre d'analyse permettant une meilleure compréhension de la relation entre le contrôle et la performance dans les équipes de projet. Ce chapitre comprend donc l'ensemble des variables retenues et la conception du processus d'étude.

Le chapitre 4 expose essentiellement la structure du questionnaire et affiche les données recueillies par questionnaire. La distribution des réponses y est présentée. Dans le chapitre 5, une nouvelle analyse statistique est menée sur les données recueillies et présentées dans le chapitre précédent. Des corrélations entre les variables à l'étude sont alors exposées. Enfin, au dernier chapitre, les résultats sont discutés et mis en contexte, c'est-à-dire interprétés par rapport à la situation chinoise.

CHAPTER 2
LITERATURE REVIEW

With the development in field of management theories, control has developed quite rapidly and unfolded indifferent forms. Both control and autonomy in management has the same purpose of serving for searching for a proper management style that can realize the organizational goal effectively and efficiently. In this part, the relevant information about control and management as well as the purpose of project team would be stated.

2.1 THE MANAGEMENT MODEL OF CONTROL AND AUTONOMY

Management has developed with several different forms, and there are two basic types: control and autonomy. And in this part, necessary knowledge about control and autonomy in management is presented.

2.1.1 The definition and foundations of control

In this part, fundamental knowledge about control is stated, it primarily includes: the concept of control, its process and types, the factors that affect control, as well as the relevant theories about control.

(1) The definition of control

Control refers to the management process of monitoring activities to make sure that they are finished as what have been put forward and modifying any important deviations (Robbins & DeCenzo, 2005). Through having an appraisal of what concrete activities have been finished and having compared with the actual performance to the desired standard, decision makers can be really clear about if the jobs which have been done are up to the standards. Generally speaking, there are three types to control: market control, clan control

and bureaucratic control. Here in this paper, it specifically indicates the bureaucratic control. Bureaucratic control emphasizes organizational authority and depends on administrative and hierarchical mechanisms, such as rules, regulations, procedures, policies, well-defined job descriptions, standardization of activities and budgets to make sure that the employees perform proper behaviors and meet performance standards (Bedworth & Bailey, 1999).

(2) The process of control

In the process of control, three different and separate steps should be considered: firstly, measuring the actual performance; secondly, making comparison between the desired standard and the actual performance; thirdly, taking necessary actions or measures to correct the deviations or insufficient performance (Taguchi et al., 1989).

When it comes to the first step in control, it is a great necessity to think about how to measure. Generally speaking, there are four factors for managers to consider: statistical reports, personal information, written reports and oral reports (Taguchi et al., 1989). Every source of information has its advantages as well as disadvantages. However, application of them in a combined way would undoubtedly enhance the quantity of relevant messages and the possibility of more accurate and valuable information for managers to consider. Through personal observations, managers can obtain the first hand and direct information about the actual performance as activities no matter major or minor can be observed. Besides, managers may read between lines. Because of the popularity of using of computers, managers become increasingly dependent on statistical reports. The measuring device also contains bar chart, graphs and numerical forms in types of difference. Statistical information has strengthened of visualizing messages easily and conveying information effectively and, however, it has evitable shortcomings, for instance, omissions of some significant and subjective information. Oral reports, such as meetings, face to face conversations, conference, phone calls, and so on, can also sometimes effectively provide messages (Dyl, 1988). This form of measure device has the advantage of filtering information, permitting direct and swift feedbacks. When it refers to written reports, it allows greater conciseness and comprehensiveness relative to oral reports, but it is slower

in time. What is more important is what the manager measure. This is because a choice of the improper criteria would undoubtedly lead to serious dysfunctional results and what are selected by managers to measure also guide and determine, to a large extent, what employees in the company are good at (Waters, 2003).

Some control measures are commonly applied in almost all control situations, and examples are found in absenteeism, turnover or employee satisfaction, as all managers guide the behaviors and activities of other people (Taguchi et al., 1989). However, it is of significance to understand that the existed differences and diversity of activities between managers. For instance, marketing managers often takes advantage of number of consumer visits for each employee responsible for sales, the quantity of consumer impressions per advertisement tool, or the market share. Different from managers who are in charge of marketing, leaders in the administration department of a government division are favorable to make use of the quantity of orders each hour, the number of pages of official document they often process or the quantity of services call they have handled Vollmann & Berry, 1997).

As for the comparison between the desired goals and actual performance, the most important matter to keep in mind is to understand the tolerable range of variation (Taguchi et al., 1989). That is to say, deviations within the planned range can be accepted and considered as reasonable and any deviation beyond should draw managers' special attention. Therefore, in term of comparing the actual performance with the planned aims, it is of a great importance to pay a special focus on the orientation and size of the variation.

And when it comes to the last step in the process of control, there are three choices for managers to select: they do not anything, they modify the actual activities to comply with the planned goals, and they make adjustments in the criteria to adjourn to the reality (Taguchi et al., 1989). The modification of the actual performance often takes place when there are defects in the staff's activities compared with the criteria (Anthony et al., 1972). Under such situation, managers make changes in the following respects, for instance, changing of personnel, redesigning of occupations, or modifications in structure, strategy or

training programs. However, the deviations of the actual performance from the planned goals, sometimes, are the problems of the goal setting instead of the employees' activities, for example, the organizational goals are far from the reality because of errors made by decision makers. Therefore, it is standards rather than performance needs to be corrected.

(3) The types of control

According to the time when control is made, control can partitioned into three types: the feed-forward control, which indicates the control is implemented before the beginning of an activity; the co-current control, which is put into practice when the activity is carried on; the feedback control, which happens after the completion of the performance (Evans & Lindsay, 1996).

The feed-forward control is the most desirable as it can effectively prevent the expected problems from taking place and, therefore, reduce the potential loss to limit by predicting the problems and taking measures to handle it (Evans & Lindsay, 1996). However, the greatest challenge for making the feed-back control is capable of collecting as much information as possible precisely and immediately, which is quite of great difficulties for decision makers. Therefore, the feed-forward sounds perfect theoretically, but fails to be applicable in practice (Otley, 1999).

When it comes to co-current control, the best-known form is direct supervision (Evans & Lindsay, 1996). In the process of the employees' operations of performing their duties, the managers can supervise their performance and may find out problems in their operations. Thus, the manager can correct the deviations as they take place. Although compared with the feed-forward control, there is probably a delay between the actual performance and the corrective actions, but the delay is minimized to the limit (Sandhu et al., 1996).

What is more, in practice, it can be totally put into practice. As its name may imply, the feedback control has the drawback of time lag between the damage generated by the deviated performance and the remedial measures (Evans & Lindsay, 1996). However, for

many management activities, feedback control is the only feasible tactics, and the control activity of financial statement is one of perfect examples. The reason why the feedback control is so permanent is that the form of control has two strengthens relative to co-current control and feed-forward control. Firstly, feedback control is of a great use to motivate employees to perform their responsibilities as it provides the relevant messages on evaluating their performance and they could improve it on the basis of the problems revealed by the feedback. Secondly, the feedback also offers managers the access to learning of the consequences and the level of effectiveness of their planning endeavor. If little variance is indicated by the information from the feedback control, then the actual performance is basically complying with the planned goals and the plan is well implemented; if not, it is of necessity to for managers formulate new measures such as modification of the goal or correction of the employees' actual performance (Anthony, 1965).

(4) The relevant factors that affect control

The validity of control is closely connected with some situational factors, such as the scale of the organization, certain people's position in the company's hierarchy, the culture of the organization, the decentralization level, and the significance of an activity (Holling & Meffe, 1996).

Because of the varied size of organization, its control system should vary correspondently (Gupta et al., 1994). Generally speaking, the larger the organization is, the more formal its control system is (Gupta et al., 1994). Therefore, for a small company, its control system is likely to be based on more personal and informal devices, and the concurrent control with direct supervision is relatively more practical; while it is applicable for an organization of middle or large size to depend on extremely impersonal and formalized controls of feedback or/and forward back.

It is commonly accepted that one with lower-level occupations relatively keeps what has to be performed clearly in mind and, thus, the interpretation of certain occupation

performance can be clearly defined. When it comes to someone in higher position of the organizational hierarchy, it should take many factors into considerations and the control setting would be multiple and, as the result, of higher ambiguity.

In an extreme centralized organization, managers do not need as much feedback as those from a decentralized one (Ahuja &Carley, 1999). This is because managers in a relatively democratic organization need to learn of the decisions from their subordinates so that they can be better in responsibility for the decisions and performances which are made by their employees. Through feedbacks, managers can properly make sure the employees' performance in conformity with the organizational goal.

Organizational culture can also have very important influence on the system of control. The organizational culture of democracy, trust, tolerance and independence can nurture the employees' sense of self-control, while an authoritative and hierarchical organizational culture is often accompanied with a very formal and imposed system of control (Schendel & Hatten, 1972). Therefore, the degree and types in control should be consistent with management techniques in control and conflicts, structure of the organization, leadership styles and other organizational cultural factors.

It can be easily understood that the significance of an activity has a deep influence on whether or how it needs to be controlled (Snell, 1992). When the control costs a lot while error has little damage to the organization, there would be of little necessity to implement the control activities. On contrary, controls should be carried out extensively when the potential errors could cause destructive consequences, even if it costs substantially (Snell, 1992).

(5) The relevant theories about control

According to Edward (1985), there are three strategies of control (Barker, 1993). The first one is so-called simple control, which could be found in factories in 19th century and small-sized companies owned by some families. In such kind of companies, bosses or owners control personally every detail of the working process as well as workers in a direct,

authoritative approach. The second one technological control and the form of control is often closely connected with the physical technology, such as the assemble line, which still exists today. And bureaucratic control is the third one, which is best known to people. In an organization of bureaucratic control, there is a set of rules which are applied to guide and regulate its members' performance. Any violations of the rules would result in punishment; on contrary, employees are rewarded. It is very important to notice that both technological and authoritative control made adoption to the form of control which preceded them and endeavored to overcome their shortcomings. Concretely speaking, the emergence of the second form of control was due to both the technological progress and employee's dissatisfaction and complaint about the arbitration from the simple control. However, the technological control also brought out some disadvantages, such as assemble line sabotage, slow-downs and protests from employees. Under such circumstance, the bureaucratic control appeared by emphasizing on orders and regulations. In fact, this form of control had originated from nineteenth century, and it has become so mature that can be put into practice easily now. Still, the bureaucratic control is also problematic.

When it come the evaluation of bureaucratic control, it has both positive and negative aspects (Salancik & Meindl, 1984). Obviously, the form of control is quite fair compared with the other two forms and also has the advantage of efficiency. However, the formalized system also makes it lack of elastic when the environment changes. Besides, Weber once said that as we put too much attention on order and the rationality of the regulations, neglect the ethical and moral values important to our organizational lives, and make decisions without considering people involved on the basis of the rules (Kalberg, 1980). The bureaucratic control and bureaucracy would consume and commandeer the other forms of controls because of it irresistible power and high rationality. At the same, because of the desire for orders from organizational members, the bureaucratic relations are rationalized continuously with character of being more organized and less negotiated (Weber, 1978).

To theorists in field of management control, the participative, democratic and decentralized system of control may be possible alternative to the bureaucratic control since

the very beginning of the modern organizational study. During the past decade or so, scholars have been trying to put into practice the flat organizational structure and emphasize the employee's involvement. According to Peter Drucker (1999) and Tom Peters (1994), managers should de-bureaucratize the organizations and the firms should be value oriented, and they still thought that the authoritative structure should be constructed on the basis of all the members' agreement rather than the official orders. To cut costs, flatten hierarchies and make quick response to the changing environment, the organization needs to reduce bureaucratic offices and regulations. According to Cheney and Tompkins (1987), this type organizational form can be defined as concertive control. It indicates the control's focus has shifted from management to employees, who cooperate initiatively and carry on self-management. Through drawing an agreement on a set of common values and regulations to monitor their working codes, workers make the achievement of concertive control. The negotiated consensus founds and recreates a value based regulation codes to offer concrete criterion for norms, ideals and rules. As the organizational members act to comply with the discourses and the system of values they have founded by themselves, the importance of concertive control becomes evident. At the same time, during the process of cooperation between project members, the social behavioral codes and values of necessity play a very important role. Employees, under the concertive control, found the rules which guide the organizational system controlled by them (Whitley, 1984). Another difference between the bureaucratic control and the concertive control mode lies in authority. Under the circumstance of the concertive control, employees are willing to obey the rules as behavioral codes are created on the basis of their value consensus (Yan & Gray, 1994). In a bureaucratic organization, as the bureaucratic control would punish those violate the regulations, the staff would have to come for work for being asked to their boss's office. However, in the company, employees go to work for being punished and criticized by their colleagues as their peers have the right monitor each other. However, the issue that whether the form of concertive control is superior both theoretically and practically to the bureaucratic control model is in question (Anthony, 1988).

Besides, according to Mintzberg (1983), based on the organizational variables, the organizational design should include five organizational structures: operating core, strategic apex, middle line, support staff, and techno-structure. Operating core includes primary-level workers who provide products or services, for example, grass-root workers, salesmen, or after sales service people. The behavioral codes of operating core can be standardized completely. However, the level of standardization can be differentiated due to the varied nature of different jobs. Strategic apex is responsible for making sure the organizational goal fulfilled effectively and provides demand for top managers. Besides, it plays the role of monitoring and coordinating within an organization. When it comes to middle line, it refers to the gathering of middle-level managers. Therefore, middle line is responsible for communicating the decisions from top managers to operating core and collecting information from the grass-root level as well as getting themselves involved in some decision-makings. Techno-structure is composed of analyzers who may come from different departments and be responsible for different occupations and work for their organization by influencing others' working. Lastly, support staff refers to those who do not belong to the workflow in the organizational structure graph. However, they do play a very important role in the organization by providing supporting services. Therefore, five types of structure are different from autonomy and control in management.

2.1.2 The definition and foundations of autonomy

With the coming of twenty-first century, the organization of learning type becomes the model for successful organizations and, correspondently, the autonomy management would be the primary management model in the not very long coming years (Datta & Grant, 1990). However, up to now, there have been very few studies in this field, which is justified by the vague definition and the freshly constructed theoretical frameworks which still needs to be developed. In this part, the connotations of autonomy management, its functioning mechanism, the construction of the performance and evaluation system as well as the indications and approaches involved in the respect are discussed.

(1) The connotations of autonomy in management

In the English language, autonomy and self-government have a very close meaning. Autonomy has the literal meaning of governing oneself. In terms of the popular politic language, it refers to a country with autonomous power or the independent or autonomous organizations with one country. In the field of academic studies on politics, the term is used to indicate the personal right of freedom. And when it comes to self-government, it indicates that certain person or organization manages its own affairs and is fully responsible for its actions and destiny (Bartlett & Ghoshal, 1990). Therefore, the self-government right is the prerequisite to self-government. In one word, autonomy is likely to be connected with something with the independent politic entity, and self-government is probably endowed with connotation of the existing of autonomous organizations relative to the state machinery (Feldman, 1989). One thing equally important is self-regulation, which put an emphasis on the organization's boundary and capabilities in formulating regulations for itself. From the perspective of organizational management, autonomy in management indicates that certain organization or team member is endowed with the capabilities for making decisions without constraints to allocate and make use of the organizational internal resources free from the influences of expectations or demands from other potential members involved (Feldman, 1989). This definition puts a great emphasis on the organization's decision-making power in the allocation of the organizational resources, the adjustment of personnel, execution of plans, and the issues on alliance with other organizations (Hoque et al., 2004). This is not affected by external environment and the dependent relationships in terms of power shows organizations have its own significance when confronted with the dynamics of external environment.

The analysis of the relationship between the autonomous factors and the system manifests that autonomy is operated under the system of the rule of man, which gains its reputation by taking advantage of its professional knowledge and then its behavior mode is determined. When it comes to the leadership style, there are generally two types: one type is a lawful leader in his/her in terms of occupational responsibility, for instance, a leader

who makes decisions reliable on votes from the board; the other refers to those can be capable of and professional in accommodating the changing environment, has a long office term, devotes most of his/her energy and time into management and, therefore, has a deep influence on the running of the organization (Turner & Müller, 2005). Generally speaking, due to the differences in the nature of organizations and operating styles, both of the two styles of leadership would manifest their own significance (Young & Tavares, 2004).

With the disappearance of the management model of carrot and sticks, an autonomous management system, which includes non-formal regulations, system, cultural identity, collective action and management structure and involves an active participation of each members of the organization, has been gradually founded and developed. And there is no exaggeration that autonomous management would play an important and indispensible role in the enterprise management in the 21st century.

(2) The functioning mechanism of autonomous management

Compared with traditional management, autonomous management is different in nature. This is testified in following aspects. Firstly, there are differences in enterprise types (Langfred, 2007). Traditional enterprises, with characteristics of power, are built on the basis of hierarchy. Besides, it puts a great emphasis on the official system and control, and the system of being responsible for leader in a vertical line. Different from the traditional management, autonomous management is operated based on the common accepted perspective about its future and development. And team learning is its feature, which focuses on life time learning and encouragement. Besides, this kind of management style also emphasizes being responsible for its consumers and has a flat network management system.

Secondly, the leadership styles are varied (Turner & Müller, 2005). Under the situations of traditional management, managers need consider the management and other issues positively and the subordinates are just waiting for orders without thinking independently. However, when it comes to the autonomous management, managers and

employees often have serious consideration about something and exchange their ideals frequently.

Thirdly, the level of decentralization of power shows variations (Ahuja& Carley, 1999). In an enterprise with the old-fashioned management, a few senior managers determine the decision-making power and the power is highly centralized. Therefore, decisions are implemented through the hierarchical system. But in a company of autonomous management, the power is decentralized and certain decision-making power is given to grass-root managers, and even to employees. Therefore, the achievement of organizational goal is highly dependent on the consciousness and organizational reasoning of employees.

Fourthly, differences can be found in the organizational goals (Kirkman & Rosen, 1999). The purpose of the traditional management is to make employees diligent and to increase the business profit as much as possible, while what the autonomous management wants to achieve are to strengthen the capabilities of the team learning, to enhance the intelligence quality of its staff and, as the consequence, to realize life value of its employees. Due to the differences above, the management results are varied. Under the situations of traditional management, employees are used to getting orders from their managers without considering and settling the working problems on their own initiatives, the passive working attitudes lead to consequences of low quality and effectiveness. And because of each staff's initiatives and enthusiasms and capabilities in creations, the working results coming from the autonomous management are of high effectiveness and efficiency.

According the learning organizational theory, one organization's success is largely dependent on the employees' involvement in management, offering them opportunities for autonomous management, approving their working fruits, and make them achieve sensed of life value (Black et al., 2005). Members from the autonomous management group can work and, at the same, learn novel knowledge, making learning and working closely integrated and properly organized. Through autonomous management, the organizational members may find out the problems on their own endeavor. Then they would select their team

partners and determines the goal to be studied and improved. Once the objective is decided, their team would make investigations to search for the reasons and put forward correspondent counter-measures. What is more, the measures are executed, examined and evaluated by themselves. In the process of the autonomous management among team members, they may develop a common perspective, learn fresh knowledge and make creations continuously with mind of openness and practicality. As the result, the organizational capabilities in quick response and creation would be strengthened.

The experts in the field of futuristic point out that employees nowadays are longer to be satisfied with working conditions that are controlled from the top managers to grass-root staff and of care little about the employees' satisfaction (Susman, 1976). Therefore, it is of significance for organizations to reconstruct the organizational forms, which adopt the form of autonomous group to give more self-management power and the rights to make decisions by themselves. The theory of 3P just perfectly justifies the trend. The so-called 3P indicates purpose, people and process. According the theory, the core purpose of management in the new century should attach a great importance to the value of people rather than efficiency. During the process, the responsibility of top managers is to build the common organizational vision and understandings, to endow the grass-root employees with more decision-making power, to offer the staff the necessary information for making decisions, and to provide them continuously opportunities for learning. Correspondently, employees themselves should be responsible for their decision-making behaviors. The progress of technology in 21st century has changed radically the commercial environment and rules for competition and terminated the scientific management theories, which focused on efficiency. Therefore, people are released from the strictly controlled organizations and managers in the new century should provide as many opportunities as possible for employees to exploit their potentials (Dill, 1958).

In practice, the autonomous management has following characteristics (Hülsmann & Windt, 2007). Firstly, employees are responsible for the working consequences and performance and work with the correspondent attitudes. Secondly, the working

performance should be controlled continuously and, for the purpose of success, the relevant information and data is collected and feedback is made beforehand. Thirdly, each employee's performance is appraised and any deviation is corrected timely. Fourthly, for the sake of an excellent performance, it is important for team members to search for organizational resources and help and guides of different types, as they are indispensible components for success. Fifthly, offering helps to counterparts who are responsible for other occupations should be encouraged because cooperation of such kind can be of a great help to enhance the whole team's working efficiency and effectiveness. Lastly, managers, especially top managers, do not need have the final word in every detail of the whole working process, and what they need to do is to guide employees, make the staff participate, provide necessary working conditions and eliminate the barriers.

When it comes to the purpose of autonomy and control in management in the context of project team, both autonomy and control serve for the aim of implementing the project team effectively and efficiently.

2.2 THE PURPOSE OF PROJECT TEAM

Project team, as a new form of teamwork, has developed into a matured stage now. And in the following part, the definition of project team, its differences from other kind teamwork as well as the dynamics of a project team would be presented.

2.2.1 The definition of the project team

The word "project" originated from the Latin word "projectum" and indicated that something takes place ahead anything else. Under the English language context, this word was initially adopted to indicate something like a plan rather than the actual performance of put this plan into practice. What is performed according to the project is known as an object. In the 1950s, as some techniques were introduced into the project management, the connotation and usage of the word "project" has changed and it referred to both objects and project. With the coming of modern management in the developed countries, especially in

western countries, theorists have been in favor of project-based organizations to finish a certain task or job as this kind of organizational form has the features of cooperative culture and initiative spirits (Schwalbe, 2000). However, the hierarchical organizations of rigid structures and authoritative characteristic are reluctant to apply the project-based program because this has come kind of conflicts with its authoritative and bureaucratic culture.

When it comes to the context of project management, project team indicates that professional employees from different departments of an organization even outside out the organization are summoned to form a temporary team to perform some duties and to carry out a temporary endeavor for the purpose of producing some product, services, or result which is required by certain client, group, or other company (Schwalbe, 2000). In another word, it refers to a one-time job for fulfilling certain task or objective for a specific consumer with limited time, financial resources and human resources (Harrington, 2000). A project team has the features of temporariness, uniqueness and progressive elaboration.

When it refers to the temporariness, it indicates that a project or an item would be finished when the organizational goal is attained, or it is quite clear that it is impossible can realize it, or the significance to achieve the goal no longer exists (Munns & Bjeirmi, 1996). However, the characteristic of temporariness does not necessarily mean the time span is very short, for instance, it could be several tears. Besides, this feature is not applicable to the product, service or the fruit produced by the project. Generally speaking, most items have a permanent effect. Take the construction of national monument for an example, and it has the aim of passing the spirit from generation to generation. It is quite ordinary that the social, economic and environmental consequences which are produced by a project are everlasting much longer than the project itself (Frame, 1994). But temporariness does indicate that a project team is temporarily built and, when the item is finished, the team would be dissolved correspondently. And it is unusual to see that a project teams exists longer than the project.

The characteristic of uniqueness indicates the distinctive products, services or other working fruits (Munns & Bjeirmi, 1996). The special products from a project team can be

the quantitative finished products as well as one component of the equipment. Services refer to that the project can be capable of offering the special services demanded by its consumers to supplement manufacturing or business distribution. The research fruits indicate the study founding which comes from the project team to put forward a certain trend or some special knowledge for the benefit of the society.

Progressive elaboration indicates that the project becomes gradually perfect and improved, and the step-by-step and continuous accumulations of knowledge about the details of the project (Munns & Bjeirmi, 1996). For instance, at the very beginning of a project, the illustrations about the scope of the item could be very sketchy and rough; with the project team's deeper and more comprehensive understanding of the goal and objective, the presentations about the item would be more concrete and detailed. The progressive elaboration of the project specifications needs to be coordinated harmoniously with the definitions and requirements of the project scope. It is especially true when it comes to the application of the item in accordance with the contract. If the details of the special task are concretely stated, the project should be carried out in accordance with it without any deviations (Lewis, 1999).

2.2.2 The difference between project team and other kind of team work

As it has been mentioned in the previous part, project team indicates that professional employees from different departments of an organization even outside out the organization come together and from a team for the purpose of fulfilling one temporary task or a common organizational goal which is required by its own company or other enterprises. Therefore, project team is a task which should be finished with explicitly required time limit as well as with limited financial resources and human resources (Harrington, 2000). When it comes to the definition of team work, it emphasize a certain task should be finished by the unified efforts of the team members instead of each individual employee. As in the new century in which technology is highly developed and knowledge is upgrading day by day, people, under such circumstance, cannot master all the knowledge

and just can be specialized in a field. Therefore, for the sake of better performance and quicker success, it is of great significance to obtain professional advices from others and some organizational goal can be realized easier within a team than work is done individually. From the definitions of project team and team work, it can be seen clearly that project team a very special kind of team work, or to put it directly, it belongs to team work.

Regarding the differences between project team and other kind of team work, the most evident difference is their literal meaning. As it has been suggested by their definitions, project refers to a very concrete working plan as well as the detailed measures and performances required to put it into practice, while work has a very broad meaning and it is confined in a certain task. Therefore, the word of work has a much broader connotation than project. As project refers to certain concrete task, therefore, it has to be closely connected with time limit, certain amount of financial resources, as well as human resources. Different from project team, team work does not have such limitations as it could indicate any task or working performance required by organizations, including project team (Cohen & Levesque, 1991).

The second difference is that project has the nature of temporariness. When some special task is assigned by the origination, a project team should be founded immediately to be responsible for this assignment. And a project team often requires coordination and cooperation from more than one department. In another word, a project team needs joint efforts. Thus, the project team members often come from different departments even from outside of the organization with quite varied backgrounds in terms of education and professional knowledge and techniques. And when the desired goal is fulfilled, the project team would be disbanded. However, when it talks to the other kind of team work, their work teams are built all the same and are ready to tackle any kind problems that hinder the progress of their work (Cohen & Levesque, 1991). And it is quite often that the building of working team is for implementing the organizational daily plans instead of a special or temporary plan. Therefore, generally speaking, the work team would be not disbanded unless the organization is disbanded. Besides, members in the other kind of team work

often belong to this permanent group and they have the long-time relationship of cooperation and understand each other very well.

The third difference lies in the amount of time, human and financial resources. Because the project team should be finished with clearly stated time limit, restrictions in allocation of financial and human resources, they finish the task strictly complying with these limitations. If the project is beyond the time limit or the assigned resources, the project would often lose it value and it fails. But in terms of the other kind team work, although their tasks are also control and restricted by these factor, it is not as much as what is required by project team (Cohen & Levesque, 1991).

2.2.3 The dynamics of a project team

In the following part, something connected with the methods of managing project team is presented. It mainly contains: The self-managing in project team and the control in project team, the influence of workers on the other workers in project team, and the connections between control, self-management and peer pressure.

(1) The self-managing in project team and the control in project team.

Firstly, it is of a great importance for project managers to strengthen control over the project team (Lewis, 2000). As the stage of constructing a project team, it is very important to recruit members with varied backgrounds and take into consideration the educational backgrounds, working experiences of each employee as well as their interests, personalities, ages and gender, making them make use of everyone's advantages. In the phase of carrying out the project, managers should set explicit and specific goals, which are appealing to the project team and the project members. At the same time, the criterion for the achievement of the goal should be given and, through the approach, each member of the project team are very clear about their duties, functions in the team as well as what needs to be finished by them. It is of equal importance to set up the behavioral codes and common values to regulate the performance of the project team, encourage the employees' participation,

accept the different opinions, value and understand differences, carry on open and frank communications, as well as implement democratic decisions. The working environment on the basis of mutual trust should be built for caring and respecting individuals, considering the each employee as the most precious asset of the group, and strengthening the spirit of the project team which emphasizes the rule that the minority should obey the majority of the team members and the individual should surrender to the whole group. Guidance, coaching, support and authorization should be applied to encourage the staff to be actively involved in the sharing the responsibilities of the project managers and to realize the success with initiative spirits.

Secondly, the staff's moral is very important to organizations, too. The moral of employees is largely dependent on their enthusiasm and willing about the perspective of the project (Connor-Greene, 2002). Therefore, it is the responsibility of the project managers to take effective measures to inspire the enthusiasm about their jobs and to create the working environment of trust, harmony and health. Under such working atmosphere, employees understand that they are the winners and their life value is realized if the goal of the project team is attained. Besides, the united group has more intelligence and power than individuals. Members in the project make coordination in the process of work, help each other, communicate their ideas frankly and candidly, place themselves in other people's positions, and provide as much feedback as possible for the progress of the project (Dommeyer, 1986). It is also very important to promote the learning atmosphere so that team members have the opportunities to make progress in their career and life. The flexible and varied team activities should held on to cultivate and promote friendships between peers and to inspire the moral of employees, such as weekend parties, the project team travel, outdoor development, and so on.

Thirdly, it is important to improve the efficiency of the whole group by depending on the moral of the project team and their relationships of cooperation and harmony, on the professional knowledge and techniques of the members, on the organizational goal and research fruits, and on its capabilities of solving problems and making decisions. A high

effective project team should have some advantages in leadership, creation, quality, cost, services and production and could maximize its production with best resources portfolio and the input of the least cost. The indispensible approach for achieving an effective project is to encourage the project team members to realize the organizational goal in accordance with their common consensus, to formulate the project plans, to make decisions, settle the conflicts and problems by the intelligence and strengthens of the team members (Pinto & Prescott, 1993).

(2) The influence of workers on the other workers in project team

It is generally believed that the production of the company would go down without peer pressure. Regarding with context of the project team, it is especially true. As peer pressure can lead up to responsibility and competition with the internal of an organization, which would effectively prevent employees from getting complacent and lazy (Kandel & Lazear, 1992). Thus, the efficiency and effectiveness of the project team would be guaranteed. At the same time, it should be noticed that some negative effects can also be generated by peer pressure.

a. The definition of peer pressure

Peer pressure indicates the affects, which are generated by their counterparts or a peer organization to require or encourage a group member to comply with the group's norms and values about the behavioral codes (Hicks & Gullett, 1975). If there is any violation of the regulations, the group members should adjust or change their values, behaviors or attitudes in accordance with general requirements from the group. Social groups which are influenced by this contain social clique and membership groups, which ask for certain requirements for joining in this kind of groups. When the peer pressure influences people, they may determine to leave or still stay in the group. Concerning peer pressure, there is term called as dissociative group, which refers to some kind of groups some people do not want to join in or even dislike it (Kandel & Lazear, 1992). Therefore, they would act challenging the norms or values of this kind of groups, or just ignore them.

Peer pressure can bring about both positive and negative influences (Pfeffer, 1995). And when people are under peer pressure, they often would behave or obtain what they would not do when they are normal, such as smoking, taking drugs, getting married, having a baby, or working and learning even harder, getting some kind of inspiration and achieving success.

When it connected with the management context, peer pressure is used to indicate the application of techniques to inspire the staff's working enthusiasm, motivations, self-goal setting and initiative spirits (Kandel, & Lazear, 1992). It is one of useful methods, by taking advantage of making comparisons between team members and the pressures caused by comparisons, to induce employees into working and fulfilling their jobs proactively. Application of peer pressure can generate an effect that can be achieved by direct orders and control from managers. And there are several approaches for leading up to peer pressure, such as team trainings, group meetings and so on. As through team trainings, people can meet their competitors in the same position and they make comparisons naturally. Thus, the peer pressure must have some kind of influences on them, no matter positively or negatively. Similarly, team meetings can also touch off peer pressure when the presentations of working consequences or reports of time schedule of works are on the top agenda of the meeting (Radner, 1986). Then, there would be invisible comparison between people in similar positions.

b. Effects of peer pressure on motivation, performance, well being, etc.

Firstly, peer pressure has a deep influence on people's motivation. According to Maslow, motivation refers to some kind behaviors, which are guided by the goals. And it can be both extrinsic and intrinsic (Maslow et al., 1987). When it come human motivation, it indicates people's demands in maximizing pleasures and minimizing pains physically and spiritually. In the working places, employees as well as employers have to find something that can help them keep working with the sense of responsibility and enthusiasm. In the past, money is enough for making people have the reason to go to work. However, with development of the society and the abundance in material, salary no long works as

effectively as it did once. Therefore, it is very important to provide some kind of new motivations for employees nowadays. And peer pressure can play a significant role in this respect. According to some motivation theories, motivation can be categorized as internal motivation and external motivation, employees can be motivated by external factors. Thus, making people under the competitive environment, which can be generated by peer pressure, can make people work with a full energy and potential. However, as different people have different reactions to peer pressure, when there are employees who face peer pressure positively and their motivations for work are inspired, it is also possible for some people to fear pressure and, therefore, they are lost in working motivations (Varian, 1990). Generally speaking, peer pressure exerts a kind of special urging power on people and, therefore, can have positive influence on individuals and organizations.

Secondly, when it talks to the relation between peer pressure and performance, it can best explain by the Yerkes-Dodson law. According to the theory, with the mental arousal, the staff's performance would become better. However, once the pressure level is up to a certain point, performance would decrease with the pressure arising. In graphics, the process is drawn as an inverted U-shape curve. Besides, according to this theory, different jobs need different pressure levels. For instance, jobs of high intelligence or difficulties ask for lower level of peer pressure; on contrary, higher levels of pressure is needed by tasks which need persistence. Therefore, according the theory, certain level of peer pressure is necessary as it makes people to make very efforts to accommodate the environment and to tackle the difficulties they are confronted with for the sake of success (Arnott & Stiglitz, 1991). And sometimes, the result is beyond their expectations. But it is not always good as it is expected. When a person is vulnerable to stand the difficulties and pressures which are demanded by certain task, it is possible for him or her to make no progress or effectiveness.

Thirdly, regarding the relationships between peer pressure and one's well being, most people would think that pressure would cause people to suffer and, thus, they would lose the feeling of well-being. Before the analysis of their relationships, it is important make know the definition of well-being and what constitute well-being. When people refer to the

term of well being in their daily life, it actually indicates health. However, in fact, health is one part of one's well-being. The term which has a very close meaning with well-being is self-interest, which refers to what is in interest of someone instead of other people (Griffin, 1986). In philosophy, it is extremely common to use well being to indicate something that is ultimately good or non-instrumentally for a person. Therefore, well-being is composed of what belong to independent interest and, however, it is of great importance, especially in the case of utilitarianism, according to which well-being is can be maximized (Feldman, 2004). On the basis of the analysis of the definition and content of well being, peer pressure also has positive aspect on people's well-being. This is because through peer pressure, for instance, people under the working conditions could find out what they are not good at or what have done badly compared with their counterparts, and then they could be stimulated by such comparisons. And they would work under great pressures and, quite commonly, they obtain a working consequence beyond their expectations. However, as the same time, pressure has negative influences on people's learning, working, and even health because of long-time exposure to immense pressures. Under such circumstance, people should learn to release pressures.

c. Peer pressure in the case of project team

It is generally believed that peer pressure can produce higher effort, but it does not necessarily promise higher utility (Brown & James, 1989). This is because peer pressure is a kind of cost, which is borne by the organizational members. At the same, while higher effort levels may be produced by peer pressure, workers under such working conditions of high pressure cannot feel comfortable even have the feelings of depression and pain when peer pressure is rampant and too evident. However, generally speaking, peer pressure is helpful for a project team in terms of promoting the team members' motivations, producing better performances, and, sometimes, enhancing people's sense of well-being, although it causes people painful and depressed if it is not well handled. As it has been mentioned before, this part focuses on the relevant factors that can generate peer pressure.

Generally speaking, there are two indispensible factors to motivate peer pressure (Brown et al., 1986). Firstly, one member from the project team should be capable of influencing the other members and then the rest of project team members can have motivations to exert some kind pressure on him. Secondly, being eager for exerting peer pressure is not enough and, at the same time, the other project team members should be endowed with the abilities of having influences on this employee. Based on the requirements of the first factor, it would be better to give employees some kind of profit sharing. This is because when the staff is only paid in form salary, the working performance of one worker would have no effects on his counterparts. Thus, no peer pressure would be touched off as no matter how bad they perform their duties, all of them would get the same salary and there are no incentives to work harder. However, although the incentive measures such profit sharing is of a great necessity, they are not sufficient enough. Therefore, the significance of the staff's capabilities and means to generate pressure between peers becomes evident. If they do not have the abilities, peer pressure in the project team would not be realized.

(3) The connection between control, self-managing and peer pressure

As it is mentioned in the previous parts, control is some kind of the managerial activity and it is of great importance in that it plays the role of checking any deviations from the desired standards and, if there is, taking corrective and necessary actions in order to realize the organizational goals as it has been put forward. With the rapid progress in management, the modern conception of control now has new function of foreseeing what will happen in the future. In one word, control in management means setting desired organizational goals and behavioral codes, making comparisons between the desired goals and actual performance and, the last step, taking remedial measures.

From the definition, if control is defined from a broad sense, it could infer that managers, peers and even employees themselves can implement control. When the managers execute the control, it refers to the control in a narrow. If the employees themselves put it into practice, it actually indicates self-management. Therefore, no matter control or self-

management play an identical function in that they both can monitor the performance of the employees and the working orientation. The difference they have lies in that different subjects carry them out. As for the influences of peer pressure on control and management, peer pressure in the project team may form an atmosphere of monitoring each other between team members. Thus a kind of control generated from the staff's counterparts is developed. Therefore, the control resulting from peer pressure could people comply with the organizational regulations and fulfill their tasks and, sometimes, the sense of self-management can be developed. According to Barker (1993), peer pressure is a kind of control form, which makes managers control and direct their subordinates (Barker, 1993). In one word, all of three serve for the purpose of supervising the staff's working performance and the realization of the organizational goal, and they just unfold in different forms.

2.2.4 Project Management in China

Generally speaking, China is not skilled in project management including related research and industrial practice. However, in recent decade, China has been making progress in project management.

First of all, China's project management is getting more and more internationalized. With the accelerated reform and open, Chinese economy is increasingly connected with global market, and the number of multinational corporations and projects is also expanded greatly. And most of the projects are operated through the measure of international bidding, consulting, and BOT (Lin Guodong, 2010). Also, the number of projects invested and operated by Chinese enterprises overseas is increasing. During the process, the internationalization of project management is building its own trend. Especially after China's entering into WTO, there emerges more and more international communication and cooperation, in which China's project management skill makes progress. For example, China will not directly copy and paste foreign model and systems any more, instead,

project managing model or system better fitting the enterprises is designed and established and applied in daily management practice.

Meanwhile, China invests resources to improve management study and research in order to master more knowledge and skill in management especially project management. For example, management as well as other related subject has been set as required courses in universities and experts or teachers skilled in management are employed to improve the higher education in management. Also, resources are put in to strengthen public knowledge of management through public education and means of media.

In addition, project management in China is developing with the trend of informatization. As the widely used of Internet and the background of knowledge economy age, the informatization of project management has been the certain trend. It is amazing that the advanced computer technology and network technology are rapidly applied in the operation and management in organizations and enterprises. That would be a big feature of project management nowadays. Project management increasingly relies on information technology, and the skill of project management largely depends on the knowledge in information technology (Wu Changxia, 2010).

In China, project management becomes one of the most important parts in social management and company management. Project management now is to improve adaptability to changes and ability to innovate through knowledge sharing and team work. And China now is concentrating on the study of human resource and the knowledge in team work (Lv & Li, 2011).

The following chapters are also about the project management in China, but in a micro look.

CHAPTER 3
RESEARCH DATA AND METHODOLOGY

3.1   INTRODUCTION

With the development of management theories, autonomy has become a major factor in project management. My topic is to research the relationship between peer pressure and motivation in project management. So in this chapter, firstly, I will introduce the intermediate variable, dependent and independent variables, and then analysis the relationship between peers pressure, motivation and performance. Secondly, I put forward my research question in four parts.

3.1.1   Variables

As defined in statistics and econometrics, independent variable and dependent variable are the two major terms in model study. Independent variable refers to the indicator whose values are known and certain when there are sample data and is used to decide the value of dependent variable. Dependent variable means the indicator whose value is the problem research cares about and the value varies with the change of independent variable's value. In a word, independent variable is the mean by which researcher collects information of focused indicator and is an indirect way when direct study on the dependent variable is difficult (Dodge, 2003).

When it comes to the selection and classification of variables, the practical problem and the related theoretical significance should be considered. For example, in this thesis, team performance should be dependent variable while peer pressure is the independent variable, because team performance may change when under different level of peer pressure. There is an additional kind of variable, which is intermediate variable. And

motivation is the intermediate variable in this thesis. Known as its name, intermediate variable is like a bridge between independent variable and dependent variable (Kandel & Lazear, 1992). Also, the availability of sample data is an important point research should consider. If the data is hardly obtained, the independent variable means nothing, and in this situation it is necessary to choose another related variable to take its place of.

3.1.2 Peer pressure, motivation and performance

According to Cokins (2009) and Luecke (2006), there are three important factors that will significantly influence the performance of a team, which are: peer pressure, collective intelligence and communication. As in this research, it is aiming to investigate the relationship between peer pressure and performance, specifically, the influence of peer pressure on performance, including both positive and negative influences.

Peer pressure, as the dependent variable in the thesis, refers to a kind of impact coming from the colleagues or other members in the same organization. All kinds of pressure have two sides. On the one hand, pressure may transfer to a motivation, which is positive in encouraging people. On the other hand, pressure can be a great hurt on people's emotion and leads to inefficient work and team performance. Peer pressure here is the pressure happened especially in working team or project team. When peer pressure is too great to bear, it is quite bad for the development of the team (Barron and Gjerde, 1997).

Theoretically, the concept of peer pressure is described as follows: it is a kind of stress that employees experience and can develop into a kind of relationship between the employee and the surroundings (Lazarus et al., 1988). There are different definitions by different scholars. For example, Braithwaite (2007) stated that peer pressure is a kind of stimulus both in positive and negative direction for it may promote employees to try hard and get reward or destroy employees' morale and endanger the wellbeing.

When controlled properly, peer pressure can be a kind of motivation mechanism in organizations. According to Kandel and Lazear (1992), on positive side, peer pressure will

promote team members to make efforts for the achievement of team goal. In particularly, they investigate the general conditions for the generation of peer pressure (including the interest relationship between peers like partnerships, and the agent having the ability to exert pressure) and the commonly seen mechanisms (including guilt caused by loafing on the job; group norms and mutual supervision), indicating that peer pressure is often co-occurring with partnerships, which means earnings-sharing schemes in teams of partnership will strengthen the motivation of team members through peer pressure, so as to solve the free-ride problem.

However, there are also negative influences with peer pressure. As indicated by Baron and Gjerde (1997), peer pressure among team members is often generated without considering the costs caused for the peers, which will be assumed/undertaken by the clients. Through the empirical study by Weiss (1987), team-based compensation schemes are not likely to generate homogeneous peer pressure as expected theoretically, but which will be differing from person to person: it will promote the motivation for individuals with low efficiency, but reduce the motivation for individuals with high work efficiency. These motivation mechanisms are then directly associated with the performance of team members and the team as a whole.

Motivation, our intermediate variable, is the activation of goal-oriented behavior. Motivation is said to be intrinsic or to describe extrinsic. Mitchell (1982) thinks that motivation represents "those psychological processes that cause the arousal, direction, and persistence of voluntary actions that are goal oriented". In addition, motivation is defined by Robbins (1993) as the "willingness to exert high levels of effort toward organizational goals, conditioned by the effort's ability to satisfy some individual need". Of course, motivation is a wide range in which there are plenty of solutions, such as knowledge sharing, Maslow's Need Hierarchy Theory, McClelland's Need Theory, Equity Theory, Expectancy Theory and so on.

When motivating an employee, you can use general motivational strategies or specific motivational appeals. General motivational strategies involve soft sell and hard sell.

Soft sell strategies refer to those moderate and spiritual measures, such as logical appeals, emotional appeals, encouraging and praising, and so on. In comparison, hard sell strategies appear as direct and powerful measures, such as barter, outnumbering, pressure and rank. When it comes to organizational level, motivation strategy exists everywhere, like establishing encouraging organizational culture. Managers should choose suitable strategy to promote specific teams.

Motivation mechanisms will influence the performance of each individual of the team, however, either positively or negatively. Motivation mechanisms will influence the team performance through influencing the individual performance of the team, which will be either positive or negative.

For the performance, Motowildo (2003: 39) said, "job performance is defined as the total value expected by the organization of discrete episodes of behavior exerted by an individual during a given period tempt". Different aspects of team performance can be measured: achievements of goals, costumer satisfaction and quality of product (Higgs & al., 2005). This kind of performance is about result of work. In our research, we study in-role performance and extra-role performance. In-role performance is about tasks and activities prescribed by organization (Williams & Anderson, 1991). Extra-role performance is about prosocial behaviors, for a good dynamic in team (MacKenzie & al., 1998).

Based on these conceptual relationships, the key variables in this research are: peer pressure, motivation, and performance.

3.2 RESEARCH QUESTION

For the sake of convenience, the research questions presented here as follows: What is the link between the peer pressure and performance in project team?

In the preceding chapter, the related literature is reviewed. The theoretical framework has been built up for the present study. The research applied a questionnaire was carried out to have a clear view of the performance of project team within the peer pressure. Detailed

information on the subjects, analysis of questionnaire, procedures and methods adopted for data collection are offered below.

A peer is "one of equal standing with another" or "one belonging to the same societal group (that is, based on age, grade or status)" (Weiss, 1987: page, 24). On the job, most of us have peers that we enjoy, respect and cultivate. We have peers that we abhor, ignore, and avoid. Most peer interaction test place "informally," as there are no lines on an org chart that connect peers together (Kandel and Lazear, 1992).

So, it is important to recognize the performance of peer pressure in project management.

3.3   RESEARCH OBJECTIVES

The study is designed to reveal basic facts about the control and autonomy in project management, such as peer pressure, motivation, performance to find out the result that the performance of project team within the peer pressure.

The findings will promote way of thinking for project manager's thinking.   The finding is as follows:

The principal objective is to define the relationship between the peer pressure and performance.

The secondary objectives are mainly focus on the relationship between motivation and individual performance and the relationship between motivation and team performance, also the relationship between peer pressure and motivation.

In addition, a novel feature of the study is through the questionnaire to different people. This feature will offer new insights into project management.

3.4 CONCEPTUAL FRAMEWORK

Hypothesis:

H1: Peer pressure is linked to the motivate the team members

H2: Motivation mechanisms are linked to peer pressure in a project team.

H3: Motivation mechanisms are linked to the performance of each individual of the team

H4: Motivation mechanisms are linked to the team performance through influencing the individual performance of the team.

Peer pressure will to some extent motivate the team members; however, in both positive and negative way.

Peer preasure

Motivation mechanisms can generate peer pressure in a team.

Motivation mechanisms

Motivation mechanisms will facilitate the employees or team members to work harder, so as to promote performance.

Performance

Motivation mechanisms will influence the performance of each individual of the team, however, either positively or negativel

Motivation mechanisms will influence the team performance through influencing the individual performance of the team, which will be either positive or negative.

Individual performance

Team performance

Figure 1 : Conceptual Framework

3.5   RESEARCH METHODOLOGIES

3.5.1 Questionnaire

In order to analysis the performance of project team within the peer pressure, this paper will apply the questionnaire to study the relations between peer pressure, motivation and performance. A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. Although they are often designed for statistical analysis of the responses, this is not always the case (Leung, 2001).

The thesis is basically quantitative information; the research methodologies include the following:

Questionnaire: At the beginning of the research, a questionnaire was handed out to investigate analysis the peer pressure, the motivation, the individual performance and the team performance. And find the connection among them in a project management.

3.5.2 Structure of the questionnaire

Four questionnaires are used in this study include: peer pressure questionnaire, motivation questionnaire, individual performance questionnaire, team performance questionnaire. The purpose of this questionnaire is to study the phenomenon of peer pressure and performance in project team according to the research of intermediate variable, dependent and independent variables. Part one is peer pressure questionnaire which about the personal opinions in dealing with peer pressure and project team. The questionnaire is based on the questionnaire made in" Pressure exerted on managers by their superior and peer managers" (Braithwaite et al., 2007). Part two is motivation questionnaire. These questions are related to the influence of motivation. The questionnaire is based on the questionnaire made in "Motivation to work, work commitment and man's will to meaning" (De Klerk, 2001). Part three is individual performance questionnaire, which about whether

all the teammates know their responsibilities and position in the project clearly. The questionnaire is based on the questionnaire made in "Vers une mesure de la performance contextuelle au travail de l'individu: étude exploratoire" (Charbonnier et al., 2007). Part Four is team performance questionnaire with the aim of investigate the relationship between project team and member's opinion. It is made based on the questionnaires in "The relationship between team characteristics with team performance in Malaysian teams" (Heng, 2006). These four questionnaires are set five levels of opinions. The degrees of these opinions are gradually depended. In this way, we can collect information and analysis the relationship between peer pressure, motivation and performance correctly.

3.5.3   Content of the questionnaire

Each questionnaire is used to investigate members' basic value opinion. The questionnaire is composed of around 41 items based on the sample questions. This questionnaire includes five types of items concerning participant's characteristics, participant's motivation, thinking, self-awareness of performance and sensitivity to environmental and social setting. These questions are designed to investigate the participant's motivations, and the influence of peer pressure in performance, including self-goals, plan, values, and attributes. Also designed to investigate participants' abilities to rethink the peer pressure link order to achieve the self-set goals. In each questionnaire, the order of these questions is unchanged. The aim of this setting is to analysis the information in a proper way. And in these questionnaires, variable questionnaire is designed to investigate the influence of variable in performance. The aim of this questionnaire is to research the control and autonomy in project management and the relationship between peer pressure and individual/team performance (Questionnaire is in appendix 1.)

3.5.4   Validity and Reliability of the Questionnaires

In order to check whether all the items within each category (each aspect of variable) in the questionnaire are internally consistent, item correlation procedure is conducted.

There are altogether 3 variables in questionnaire. Each variable has multiple indicators. Intermediate variable stands for motivation, independent and dependent variables mean peer pressure and performance.

After the information collecting the alpha value indicates the internal consistency within the multiple items. SPSS16.5 provides the function of reliability analysis to check the items' internal consistency. Because the items are originally designed and sorted into four parts, such as peer pressure, motivation, individual performance and team performance, and the number of items is limited, there is no need to do a factor analysis. Take the four parts of questionnaire as four scales, table 3.1 shows the results yielded the scale reliability analysis together with the number of items that entered the final statistical analysis. According to Heng (2006), once scales with Cronbach Alpha more than 0.6 will be accepted for statistical analysis. Our Cronbach Alphas are higher then 0.6. They are acceptable for statistical analysis, but they are relatively weak.

Table 1 Results of reliability analysis

Questionnaire	Cronbach alpha
Part One Trying to do all my management tasks well is impossible I often lose sleep thinking about everything I have to do at work The pressure on me at work is almost unbearable If I was not so busy I would be much more productive Improve my performance or behavior in my work is my favorite In my project team, I prefer to work with the guy who works effectively	0.700

I like to work in a small project team with less peer pressure I have considerable capacity to cope with many things simultaneously	
Part Two I like to be absorbed in my job most of the time I prefer the easy job to the challenging and difficult tasks I feel a sense of personal satisfaction when I do this job well Most of my personal life goals are job-oriented I believe "If you work hard, you will succeed" My job is just a small part of my life I prefer to avoid situations at work where I might perform poorly For me, development of my work ability is important enough to take risks I have very strong ties with my present job which would be very difficult to break	0.629
Part Three I help colleagues who have spontaneously high workload I am attentive to the well-being of my colleagues I agree completely with the objectives of the organization and supports strongly Participate in team meetings or group activities bored	0.667

I tolerate the difficulties encountered in the business without complain	
I always finish on time the work entrusted to me	
My personal goal is tied to the goal of the project	
I don't have enough skill or knowledge to do this project	
I have difficulty working in teams	
Part Four	0.614
There is no real warmth or affection between team members	
Conformity to the group's way of thinking and behaving is expected	
Members of the team are comfortable with each other	
Members rarely express disagreement with initial group goals	
Members fear rejection by other members of the team	
The team is accomplishing its goals	
Although team members relate well, meetings are ineffective	
Differences are not encouraged	
People seem to have very different views on how things should be done in this team	
Members of the team do not know each other well as people	

3.5.5   Participants and technology of sampling

In this study, a board range of project teams will be sampled from several different kinds of project teams. These team who were in the survey are form both small and large

team. These teams are in the I.T. Industry and owned by Chinese companies. This researcher will be sent to the companies in Shanghai, Beijing, Shenzhen and Guangzhou four places. We used snowball sampling. In fact, we met directors in each company. Those directors send the questionnaire to their team members.

CHAPTER 4
DATA COLLECTION

Having determined the method to do the research, which is through questionnaire, data collected on the questionnaire will be introduced and explained in this chapter. Specifically, basic information of participants, participants choices in each question, the distribution of the answers on different degrees, as well as a simple evaluation on the data in general.

In the research, as mentioned above, a board range of different project teams from I.T. industry in China was sampled. The teams involved in the survey include organizations of different scale. The researchers were sent to Shanghai, Beijing, Shenzhen and Guangzhou, the major big city in China, to choose samples in the randomized way. The researches connected with the companies through their network of friends as well as the past classmates and the sequent acquaintance.

We sent 460 questionnaires in all at the end of December 2010. Finally, a total of 35 teams with 294 respondents returned the completed and effective questionnaires. The following description of data collection and the related analysis are both based on the 294 questionnaires.

4.1   BASIC INFORMATION OF PARTICIPANTS

First of all, there is an overview of the involved participants' information just as shown in the questionnaire. As told in table 4.1, in the total 294 copies of questionnaires, male participants take a big amount, which accounts for 64.97% while female participants

are only the part of 35.03%. Considering the age of participants, zero appears in both age group of 60-69 and more than 69. That is related to the characteristic of the industry as well as the feature of Chinese retirement system. 41.16% of participants belong to the age group of 30-39, 28.91% of participants are aged from 20-29 and 26.53% of participants are in the group of 40-49. Only 10 persons are aged between 50 and 59, accounting for only 3.4%. When it comes to the years participants work for their project, nearly half of them have worked for 1 to 5 years for the project. The second large group is "6-10" years, the third is "less than 1 year" and the smallest group is "more than 10 years". Three quarters of the participants said their team members were from the same company. Only 71 persons answered "no" on the question. As to the question of "How many staff owned in this project", the results appear a descending trend. The most participants' team have 1-10 members, and only 2 participants' team have more than 50 team members.

The following sections will introduce the results and the data distribution of questionnaire part one to part four. Participants' answers may vary with their gender, ages, and other personal characteristics. Although, managerial suggestions are the focuses, in order to explain the results more scientifically, in this thesis the researcher will discuss the data results and analyze the topic combining the knowledge in the fields like Chinese culture, psychological knowledge, industry characteristics and so on.

Table 2 Answer distribution of participants' basic information

Items	Distribution of the answers					
Gender	Male	Female				
	191 (64.97%)	103 (35.03%)				
Age	20-29	30-39	40-49	50-59	60-69	>69
	85(28.91%)	121(41.16%)	78(26.53%)	10(3.4%)	0(0%)	0(0%)
How long (years)	<1	1-5	6-10	>10		
	39(13.27%)	132 (44.90%)	66(22.45%)	57(19.39%)		
Same company?	Yes	No				
	223 (75.85%)	71 (24.15%)				
How many (persons)	1-10	10-20	20-30	30-40	40-69	>50
	129(43.88%)	105(35.71%)	24(8.16%)	18(6.12%)	16(5.44%)	2(0.68%)

4.2   PEER PRESSURE QUESTIONNAIRE

Including the peer pressure questionnaire, the choices in the rest four forms of questionnaire are all designed to five levels, level 1 to 5 respectively refer to "I strongly disagree", "I disagree", "I am not sure", "I agree", and "I strongly agree". Participants should tick one level after reviewing the statements in the questionnaire.

Part one is the peer pressure questionnaire, which aims to know something about the tested persons' pressure from the peer in the project. This scale for peer pressure including eight pieces of statements was formed through reliability analysis on SPSS as shown in table 3.1. In detail, a weighted average score of each item was first calculated multiplying

the score of each level by the percentage value. Take the first item "Trying to do all my management tasks well is impossible" in table 4.2 as an example, the average score of this item will be 2.2174 for 1*35.03% + 2*23.13% + 3*30.27% + 4*8.16% + 5*3.40% = 2.2174. In doing so, each item will have an average value. Input the values into SPSS, the software's native function then will run the reliability analysis and output the Cronbach alpha. When Cronbach Alpha is more than 0.6, the scale will be accepted for statistical analysis. Once the Cronbach Alpha is less than 0.6, the item with large coefficient will be removed and the new Cronbach Alpha should be calculated again until the value satisfy the need. The other three parts of questionnaire are formed in the same way.

The data collected on peer pressure are shown in the below table. As a matter of fact, except item 8, the other 7 items are stated in a positive way, which means the premise that participants are faced with great peer pressure is perceived in researcher's mind firstly. Therefore, if participants truly have little pressure, they will have the courage to tick on level one "I strongly disagree". Specifically for Chinese people, the doctrine of the mean Confucian guides them not to behave extremely. Under such circumstance, level 3 may become the favorite choice. And level 1 and level 5 can reflect the inner pressure really when ticked.

Based on the above knowledge, it is easier to understand the distribution of the answers in the peer pressure questionnaire. Seeing item 3 "The pressure on me at work is almost unbearable", 33.67% of the participants choose level 3 "I am not sure". It can be inferred that nearly one third of people don't have great peer pressure nor little pressure. The answer distribution of item 7 has something to do with the team scale participants live in. If one feels little peer pressure in a small team, he or she will choose "I strongly agree". But if one feels happy in a large team, he or she will choose "I am not sure" because the results living in small team are unknown to them or choose "I disagree" instead of "I strongly disagree". The further analysis on the data and related explanation are given in Chapter 5.

Table 3 Answer distribution of the peer pressure questionnaire

Questions about peer pressure	Distribution of the answers				
	1	2	3	4	5
1. Trying to do all my management tasks well is impossible.	103 35.03%	68 23.13%	89 30.27%	24 8.16%	10 3.40%
2. I often lose sleep thinking about everything I have to do at work.	29 9.86%	74 25.17%	67 22.79%	105 35.71%	19 6.46%
3. The pressure on me at work is almost unbearable.	28 9.52%	55 18.71%	99 33.67%	84 28.57%	28 9.52%
4. If I was not so busy I would be much more productive.	19 6.46%	33 11.22%	81 27.55%	91 30.95%	70 23.81%
5. Improve my performance or behavior in my work is my favorite.	39 13.27%	66 22.45%	89 30.27%	33 11.22%	67 22.79%
6. In my project team, I prefer to work with the guy who works effectively.	25 8.50%	18 6.12%	94 31.97%	56 19.05%	101 34.35%
7. I like to work in a small project team with less peer pressure.	7 2.38%	13 4.42%	40 13.61%	145 49.32%	89 30.27%

8. I have considerable capacity to cope with many things simultaneously.	10	62	92	41	89
	3.40%	21.09%	31.29%	13.95%	30.27%

4.3   MOTIVATION QUESTIONNAIRE

Part two is the questionnaire on motivation in project team. On item 9, more than half of the participants choose "I agree", suggesting that it is quite possible that those persons always cannot concentrate on their job. For item 10, relatively, participants' answers are distributed equally, and the percentage values of five levels are more or less the same.

Almost half of the persons feel a sense of personal satisfaction when they do the job well. The percentage value reaches 48.98 while only 8.16% of participants strongly disagree the statement. What attracts eyeballs is that only 7.14% of the participants choose the mean level on item 12. The number of people agreeing the statement is more or less the same as the number of people disagreeing the statement. 149 persons stand on the side of "disagree" and 124 persons stand by "agree". Item 13 directly describes the motivation words, and more people choose "agree". It can be known from the answer distribution that the motivation system of the organization in which people choosing "agree" live works well. Item 14 evaluates the importance of the job in participants' daily life. If motivation of the team generates positive effect, team members will pay more attention to their job, and there will be more person choosing "disagree". However, the answer is subject to one's philosophy of life quality. Item 15 tells the degree that team members want to have an excellent performance. Less persons choosing "disagree" means better motivation system. In item 16, the level of the motivation system that improves team members' eager to develop themselves is tested. Item 17 evaluates the impact of motivation on team members' autonomy and organization's control effect. When participants feel that they have very strong ties with their job, which would be very difficult to break, the motivation of the team take effect and achieve its controlling goal.

As defined above, motivation is an intermediate variable in the research. It is set to figure out the relationship between peer pressure and team performance and further help the researcher understand the situation of autonomy and control in Chinese project management. And this part of questionnaire is designed to help the researcher to better analyze and explain the overall data evidence in other three questionnaires.

Table 4 Answer distribution of the motivation questionnaire

Questions about motivation	Distribution of the answers				
	1	2	3	4	5
9. I like to be absorbed in my job most of the time.	6 (2.04%)	17 (5.78%)	79 (26.87%)	152 (51.70%)	40 (13.61%)
10. I prefer the easy job to the challenging and difficult tasks.	58 (19.73%)	74 (25.17%)	49 (16.67%)	77 (26.19%)	36 (12.24%)
11. I feel a sense of personal satisfaction when I do this job well.	24 (8.16%)	55 (18.71%)	50 (17.00%)	144 (48.98%)	21 (7.14%)
12. Most of my personal life goals are job-oriented.	73 (24.83%)	76 (25.85%)	21 (7.14%)	92 (31.29%)	32 (10.88%)

13. I believe "If you work hard, you will succeed".	29 (9.86%)	66 (22.45%)	79 (26.87%)	83 (28.23%)	37 (12.59%)
14. My job is just a small part of my life.	15 (5.10%)	48 (16.33%)	51 (17.35%)	96 (32.65%)	84 (28.57%)
15. I prefer to avoid situations at work where I might perform poorly.	3 (1.02%)	19 (6.46%)	68 (23.13%)	144 (48.98%)	60 (20.41%)
16. For me, development of my work ability is important enough to take risks.	38 (12.93%)	42 (14.29%)	95 (32.31%)	51 (17.35%)	68 (23.13%)
17. I have very strong ties with my present job which would be very difficult to break.	54 (18.37%)	53 (18.03%)	30 (10.20%)	87 (29.59%)	70 (23.81%)

4.4   INDIVIDUAL PERFORMANCE QUESTIONNAIRE

Performance including individual side and team side is the dependent variable in the research. Excellent performance suggests a well-controlled project and a well operated project management.

Especially in I.T. field, projects are often to write a huge series of program for running certain objects, such as an online game, calculating software, and so on. The feature determines that the project values a high level of cooperation. Any mistake of any person leads to the failure of the whole project. Therefore, individual performance is more important than team performance to some extent.

Generally speaking, the questionnaire below tells a good situation of sample team's project management. On item 18, only 42 persons choose the negative answer, accounting for 14.29% in total. Most of people help their colleagues who have spontaneously high workload. Also, more than a half of persons are attentive to the well-being of their colleagues. 35.03% of the participants agree the statement. Item 20 actually evaluates the cooperation level of the sample teams. Half of the participants choose positive answer, and nearly 20% of them strongly agree completely with the objectives of the organizations and supports strongly. A large number of participants feel participation in team meetings or group activities bored, and the percentage reaches 46.6%. That may be affected by Chinese bureaucracy mode, which causes holding meetings and activities to be like completing missions and of formalism. About item 22, 46.26% of the participants disagree that they tolerate the difficulties encountered in the business without complain. Very small parts of people choose "agree". That may be related to the basic characteristic of human beings. Almost nobody can tolerate without complain. Noticeably, most people (79.26%) can finish the work on time, which is the basic indicator to evaluate individual performance. Item 24 is similar to item 17 to some extent. It suggests the relationship between team member and the team and further tells the controlling effect of the management. Item 25 and item 26 evaluate the individual performance on their working skills. Chinese participants' answer will still affected by Confucian culture of modest. It can be seen that most people choose "agree" on item 25 and choose "disagree" on item 26.

Besides, it should be taken into consideration that the answer may be affected by the condition and environment in which participants are completing the questionnaire, such as the time spent, surroundings, and even impulse and emotions, and so on.

Table 5 Answer distribution of the individual performance questionnaire

Questions about individual performance	Distribution of the answers				
	1	2	3	4	5
18. I help colleagues who have spontaneously high workload.	5 (1.70%)	37 (12.59%)	104 (35.37%)	119 (40.48%)	29 (9.86%)
19. I am attentive to the well-being of my colleagues.	3 (1.02%)	22 (7.48%)	97 (32.99%)	103 (35.03%)	69 (23.47%)
20. I agree completely with the objectives of the organization and supports strongly.	46 (15.65%)	59 (20.07%)	38 (12.93%)	94 (31.97%)	57 (19.39%)
21. Participate in team meetings or group activities bored.	19 (6.46%)	57 (19.39%)	81 (27.55%)	117 (39.80%)	20 (6.80%)
22. I tolerate the difficulties encountered in the business without complain.	53 (18.03%)	136 (46.26%)	24 (8.16%)	54 (18.37%)	27 (9.18%)
23. I always finish on time the work entrusted to me.	8 (2.72%)	18 (6.12%)	35 (11.90%)	194 (65.99%)	39 (13.27%)

24. My personal goal is tied to the goal of the project.	7 (2.38%)	85 (28.91%)	84 (28.57%)	82 (27.89%)	36 (12.24%)
25. I don't have enough skill or knowledge to do this project.	73 (24.83%)	99 (33.67%)	42 (14.29%)	51 (17.35%)	29 (9.86%)
26. I have difficulty working in teams.	66 (22.45%)	98 (33.33%)	37 (12.59%)	68 (23.13%)	25 (8.50%)

4.5   TEAM PERFORMANCE QUESTIONNAIRE

Team performance is the key variable the researcher focuses. It reflects the final effect of series of managing activities and implies the results of autonomy and control within a project team with peer pressure.

Item 27 evaluates the relationships between team members. On the one hand, the answer of item 27 reflects the effect of peer pressure and team management; on the other hand, the answer will also depend on the personal characteristics of team members as well as their communication skills. On this item, more people feel the statement is not in accordance with their real situation, which means they feel there is real warmth in their team. From the answer distribution of item 28, it can be inferred that in most of the sample teams, the management's control on diversified behaving and thinking is relatively strong. At least, most of the team members feel the organizations expect so. Item 29 also reflects the relationship between team members. The reason why several items aiming at evaluating the relationship between team members from different aspects is that the relationship between team members directly determine the team performance and can really tell the effect of project management. 27.89% of the participants agree the statement and 21.77%

strongly agree. Whether team members rarely express disagreement with initial group goals also relates to the Chinese culture. In the questionnaire, quite a lot of people (66.67%) feel their team members rarely express disagreement. That also reflects the controlling atmosphere in the team. Sometimes, over-control leads to no innovation. On item 31, 31.97% of the participants choose to agree that members fear rejection by other members of the team. On item 32, nearly 60% of the participants choose positive answer, which means this part of persons' teams have a good team performance, at least they are all accomplishing their goals. Item 33 reflects the similar meaning to item 21. Item 34 reflects the similar meaning to item 30 and item 31. To some extent, questions asking the same meaning from different aspects are testing the participants' consistency in doing the questionnaire. Item 35 suggests that whether team members support the way the team doing work and it has impact on the final performance of the team. On this item, the number of people agreeing the statement is smaller than the number of people disagreeing the statement. On item 36, only 20 persons, accounting for 6.80%, choose "I am not sure".

Table 6 Answer distribution of the team performance questionnaire

Questions about team performance	Distribution of the answers				
	1	2	3	4	5
27. There is no real warmth or affection between team members.	61 (20.75%)	93 (31.63%)	29 (9.86%)	54 (18.37%)	57 (19.39%)
28. Conformity to the group's way of thinking and behaving is expected.	16 (5.44%)	82 (27.89%)	62 (21.09%)	92 (31.29%)	42 (14.29%)
29. Members of the team are comfortable with each other.	5 (1.70%)	86 (29.25%)	57 (19.39%)	82 (27.89%)	64 (21.77%)
30. Members rarely express disagreement with initial group goals.	5 (1.70%)	53 (18.03%)	40 (13.61%)	155 (52.72%)	41 (13.95%)
31. Members fear rejection by other members of the team.	36 (12.24%)	61 (20.75%)	58 (19.73%)	94 (31.97%)	45 (15.31%)

32. The team is accomplishing its goals.	6 (2.04%)	68 (23.13%)	44 (14.97%)	147 (50%)	29 (9.86%)
33. Although team members relate well, meetings are ineffective.	7 (2.38%)	15 (5.10%)	65 (22.11%)	133 (45.24%)	74 (25.17%)
34. Differences are not encouraged.	59 (20.07%)	102 (34.69%)	43 (14.63%)	22 (7.48%)	68 (23.13%)
35. People seem to have very different views on how things should be done in this team.	49 (16.67%)	94 (31.97%)	86 (29.25%)	37 (12.59%)	28 (9.52%)
36. Members of the team do not know each other well as people.	85 (28.91%)	79 (26.87%)	20 (6.80%)	42 (14.29%)	68 (23.13%)

CHAPTER 5
RESULTS ANALYSIS

This chapter will have a statistical analysis on the results of data collected. As mentioned in above chapters, there are 35 teams with 294 team members in total participated in the questionnaire survey. They are required to decide the level to which they consider the statement presented in the questionnaire. The results are the basic materials the analysis works on in this chapter. The statistical analysis includes descriptive statistical analysis, correlation analysis and so on. Meanwhile, related theoretical explanations also follow.

5.1   DESCRIPTIVE STATISTICAL ANALYSIS

First of all, frequency analysis for four parts of questionnaire as well as the basic personal information questionnaire has been presented in the table 4.1, table 4.2, table 4.3, table 4.4 and table 4.5. Table 4.1 gives the information on participants' basic properties as well as several team features, such as gender, age, the time they work for the project, etc., as well as the team size. Tables 4.2 to 4.5 report the frequency results of participants' subjective ratings of different statements on different topic.

Table 5.1 gives out several descriptive statistical indicators related to the team members' responses in four parts of the questionnaire.

Table 7 Descriptive statistical indicators for four parts of the questionnaire

Scales	Mean	Standard deviation	Percentage of score above 3.0 points
Part One	3.2617	0.5379	44.72%
Part Two	3.2917	0.3605	51.93%
Part Three	3.1409	0.4849	45.84%
Part Four	3.1698	0.4006	46.74%

First working out the weighted average score of each item and then calculating the overall weighted mean value of the whole scale calculate the mean value of each scale. Generally, from table 5.1, it can be seen that the mean values for all four parts of questionnaire are all above 3.0. What's more, the standard deviations of the scores are relatively small, indicating that participants' scoring at each statement don't fluctuate dramatically in every scale.

Considering the descriptive statistics in questionnaire part one, it can be concluded that there do exist peer pressure in the sample project teams. Because the statements in questionnaire part one is presented in negative way, higher score means agreeing the negative statement to a larger extent, and thus a bigger peer pressure. Percentage of score above 3.0 points verifies the existence of peer pressure as well. In addition, the value of standard deviation tells a steady condition of peer pressure and consistency choice of the survey participants.

When it comes to part two of the questionnaire, the mean value is bigger than that of part one, and its percentage of score above 3.0 points is also larger than that in part one, reaching 51.93%. What's more, participants' scoring has a smaller variation than they do in

part one, which is shown in the standard deviation. And the standard deviation of scores in this questionnaire is the smallest of the four. What should be noticed is that in this questionnaire about motivation in project team, it is supposed that the motivation system works well in the organization in fact. Therefore, all the statements in the questionnaire part two are presented in a positive way, and the higher score refer to better motivation effect or better-operated motivation system.

As to part three of the questionnaire, the mean value of scores, which is 3.1409, is the smallest of the four. As known, part three is about the individual performance. Therefore, the small mean value suggests that participants generally don't have a high evaluation for their own performance. Also, the above conclusion should be based on the premise that the statements in this part of questionnaire are presented in positive way. That is when participants choose "agree", they feel they perform well. And higher score means better performance. The low mean value on the one hand tells the not high evaluation of participants on themselves; it on the other hand is a reflection of lack of confidence or the property of modest. Besides, the standard deviation is not high, too, with a value no more than 0.5.

When it comes to the last part of questionnaire, the mean value of scores is also above 3.0 points, and the percentage of scores above 3.0 points reaches 46.74%. This part of questionnaire reflects the condition of team performance in team members' minds. The standard deviation is 0.4006.

Descriptive statistical analysis is the basic research on the first hand data collected. Through this kind of analysis, the overall image of the survey will be perceived. For example, it can be concluded that in the sample project teams, peer pressure does exist and is not small to ignore; the motivation system in these sample organizations works not bad; and condition of both the individual performance and team performance are understood as well. What's more, the quality of the data can be also seen, such as the standard deviation telling the variation width of collected data. However, the inner relationship between scales

emotions, they will not be absorbed in their job, and naturally, their job cannot be completed as perfect as the condition without such an effect. Therefore, there will be bad individual performance.

The third pair of variables, motivation and individual performance, show a significant positive correlation with each other. The correlation coefficient is 0.9880, very close to 1. It has been recognized that motivation can promote individual performance. But what kind mode of motivation can effectively improve individual performance? Milne (2007) found that reward and recognition programs could positively affect motivation, performance and interest within an organization. Besides, although there's a little problem, team-based incentives can also encourage and support a range of positive outcomes if designed appropriately. What's more, Barachini (2009) found that "justification and refutation of perception", "reaching own goals", "learning from each other" and "building up trust" were the major expected returns when motivation system gives compensation. As a matter of fact, all these factors and statements belong to the field of autonomy and control in project management. The further discussion on the topic will be presented in next chapter. Besides, it should be understood that motivation system is designed to release peer pressure to some extent. That is why motivation is considered as an intermediate variable in this research. The transmission chain is like this: better individual performance demands appropriate peer pressure, and in order to control and manage peer pressure, motivation is needed.

When it comes to team performance and peer pressure, the correlation coefficient is -0.6020. Just as seen, team performance is negative related to peer pressure. Just as analyzed above, great peer pressure is bad for individual's performance. When team performance is formed based on the individual's performance, the factor affecting individual performance will certainly affect team performance. But the absolute value of the coefficient is lower than that between peer pressure and individual performance. What's more, it is not as significant as the correlation coefficient between peer pressure and individual performance. The reason may be that peer pressure primarily linked to individual's condition instead of the property of the whole team. The link between peer pressure on individual performance

is quite direct while indirect on team performance. From this point, it can be inferred that if the intermediate factors in management are controlled well, the negative link will be reduced when it comes to the team level. That is the function of project management, and is also the subject in autonomy and control which managers need to pay attention to. And it can be known the importance of project management in the success of a project. The same happens in other organization management.

The correlation coefficient between motivation and team performance is 0.8004, smaller than that between motivation and individual performance. And the value is significant on the level of 10%, the same as the result of motivation with individual performance. Team performance is the results of the chemical reaction in individual performance. If every team member performs well, the entire team naturally does well. However, the reality is not as perfect as thought. From team member's profit to a whole team's success, there needs other catalyst, such as knowledge sharing between team members, leaders' ability to organize and coordinate. Take knowledge sharing as an example, more and more organizations are paying attention to knowledge management and implementing knowledge sharing programs in their organizations because they consider the knowledge shared can leverage the value of original knowledge and will enhance the competitive strength of organization. In a survey done by Journal of Knowledge Management, it is reported that the cost associated with failing to manage knowledge in organizations is due to the best knowledge is not acceptable at the right time/format/place (Chase, 1997). When knowledge fails to take effect, individual's profit is hard to transfer and finally contribute to the team's achieving its goal.

The last pair of variables, individual performance and team performance, have a correlation coefficient of 0.9989 which is statistical significant on the significance level of 5%. We all believe that team performance includes individual performance, communication, and management and so on. However, team performance may have different results in different compositions of the mentioned factors. Schein (1984) emphasized that we should know the dynamic evolutionary forces that govern how the team performance evolves and

changes. Besides, he defined individual performance as "a pattern of basic assumptions" which were developed in coping with "problems of adaptation and internal integration among colleagues" and would be taught to new comers as "correct ways to perceive, think, and feel" the problems mentioned above. What's more, he discovered through empirical research that the relationship between employees' performance and the team performance varied significant following other management factors. Besides, he said that effects of individual performance were stronger than other factors. That may be reason why there is a high correlation coefficient value between individual performance and team performance. In order to achieve a successful teamwork, project team managers should first focus on its members. It should be considered that how to make team members produce the most powerful outputs.

CHAPTER 6

DISCUSSION ON CHINA'S PROJECT MANAGEMENT

As stated in the beginning of the researching method, the research is based on the questionnaire survey in four big cities of China. Therefore, the results of the research can only reflect the condition of project management in China even only in the four cities. In this chapter, a further discussion on China's project management will be presented based on the above research results.

6.1   EVALUATION OF TEAM PERFORMANCE WITHIN PEER PRESSURE

As mentioned in findings conclusion, team performance is linked to peer pressure in fact. But some intermediate factors can change the direction and degree peer pressure affects team performance.

Chinese academia made a lot of researches on Chinese team performance within peer pressure from different aspects (Wu, 1994 & Dou, 1999). And there are several representative points of view. The first is self-adjustment theory, which believes that better self-adjustment ability is the premise of peer pressure developing its positive effect. In Chinese state-owned enterprises, state assets' owner absence leads to a fierce competition in winning the position of leaders in different levels. In that situation, peer pressure becomes the best motive promoting individuals to work harder and perform better. Once self-adjustment works well, peer pressure can be positively related to performance. However, the performance here can be team performance, or individual performance only. The result depends on the control of managers as well as the external supervising institutions.

The second is about the lack of pressure releasing instruments. Lin Yifu (1997, 1999) is the representative of the theory. He believes the basic problem in peer pressure harms team performance is the lack of pressure releasing instruments. He admitted peer pressure did exist almost in every organization. Therefore, the way is to release it instead of removing it. The key point in this theory is to reduce the information asymmetry to the maximum limit by utilizing effective communication system between managers and team members, because managers usually cannot understand well the true condition of peer pressure the team members are faced with. Therefore, the problem of peer pressure harms team performance is not the peer pressure itself, but the lack of methods and instruments for pressure releasing.

The third is the manager control theory. It is widely agreed that the managers' control is important in Chinese enterprises. Some Chinese scholars studied the current condition of managers' control in China such as Fei Fangyu (1996), Liu Shijin (1999) and Gao Chuang (1999). They found that in the organizations with better management control, even though the pressure is great, it would not affect the team performance. But in the organizations with poor management skills and ability, peer pressure does its greater badness to the organization.

There are scholars who believe the problem lies in motivation and communication system is not improved. They hold the view that the same point of those countries with successful team performances is that they all have developed motivation and communication system. And China is weak in the above aspects. Some scholars (Chang et al., 2007) feel motivation and communication are not problems showed in a part but systematic one. The methods controlling peer pressure form a wide system with multiple functions, such as motivation system, reporting system, knowledge sharing system and the communicating system and so on. We should do our reform based on considering the problem as an integrated systematic project. Entrepreneur is also taken as a problem. The supporters believe the purpose of reform is to solve two questions. One is the motivation on entrepreneur or managers, and the other is the selection of entrepreneur and managers.

China is weak in entrepreneur and manager selection. There is not any market of human resources selection with the system of "survival of the fittest". Therefore, that is also an important problem facing with the management reform (Zhang Wei, 1999). The final is the conflict of communication channels. Scholars who hold the view feel that it is necessary to solve the coordination problem between team members (Bruce, 1999). Sometimes, the pressure is imagined and created by the individual himself or herself. The key point lies in the inefficient communication channels, which will cause misunderstandings and other mistakes. Those finally affect the team performance negatively.

We can find from the above description that the researches are oriented by the problem existing in the current reform in China. And the research on culture factors is not enough. The properties of Chinese culture will certainly have impact in the interaction of peer pressure and team performance.

6.2 EVALUATION OF CONTROL AND AUTONOMY IN PROJECT MANAGEMENT IN CHINA

6.2.1 Establishment of conception of control and autonomy

As project team gradually becomes one of the major forms of organization, project management is playing a more and more important role in the fields of management as well as the study of management subject. Only when managers can successfully do the managing job in project management, can the soft conditions best support the development of the project and promote the success of the whole project. However, project management is general conception with wide range, and different knowledge is applied on different purposes. When it comes to dealing with the peer pressure influencing the team performance, subjects of control and autonomy should be considered and studied.

Firstly, the management departments in organizations, such as human resource and other formal committee with certain managing power should reinforce the knowledge of peer pressure management which relates to autonomy and control, as well as the measures to release great pressure and transfer pressure to motivation. Most of the negative behaviors

under great peer pressure are bad to the development of the whole project (Pfeffer, 1995; Varian, 1990), so it is necessary to investigate and control this kind of behavior. However, we can make the team members in project team be aware of their own behaviors through ideological education on self-adjustment. In the process of the education, educators should have to focus on the education on right way of pressure releasing, communication skills, personal responsibility in teams and the governing principles to complete the job.

Besides, different project teams of different industry should also consider their unique environmental factors and internal characteristics, and keep a proper level of control and autonomy. Over-control leads to lack of flexibility and may even cause negative reaction of members being controlled (Drucker,1999 & Peters, 1994; Salancik & Meindl, 1984). Meanwhile, over-autonomy leads to lack of sense of collective and may result in more difficulties in future control and management. Therefore, after the establishment of conception in mind of control and autonomy, project team managers need to consider the balance between the two.

6.2.2 Standardized building of evaluation system

With the establishment of conception in project team control and autonomy, the core problem in organizations has been a set of evaluation arrangements about how to recognize the peer pressure and target the level of pressure, which measure is proper to take to manage it, and so on. That requires organizations to improve the system standardization in project teams.

Firstly, we have to perfect the recognition system. Establish an effective system which can help in recognize team members' mental condition, peer pressure suffered and difficulties in releasing the pressure and define the information of this kind of pressure, including where does it come from, is it temporary or lasting, whether managers should take action, and so on. It is obvious that Chinese system building in this aspect is not developed, and many problems, which are related to the management, are not solved by standard systems, such as the knowledge sharing and employees' performance evaluation.

What's more, there are many operation problems in establishing a recognition system. For example, rights and obligations between team or organization leaders are not clear enough, which leads to a blank in managing work distribution; companies are always not willing to spend resources in aspects seem to be not related to production, especially when establishing an effective recognition system cost much.

Besides, it is also important to improve the modernization of informal systems in project team management when we are launching the standardization of pressure recognition systems. As to the informal systems, which are connected with project team management, we can make them formal by standardization to build a set of system which can interact with each other and generate a synergistic effect.

In addition, it is also necessary to establish a solution set in system. It is like a knowledge sharing system in fact. There will be a database collecting related data or cases related to peer pressure and the related control measures. Once met with the problem in balancing control and autonomy or releasing team members' pressure, managers can refer to the system. Of course, the system has to be update in time.

6.2.3 Corporate governance helps to improve project management

The improvement in managers' control and autonomy knowledge depends on the condition of corporate governance in the organization. Control and autonomy is also the topic in the relationship between shareholders and executives, and when there is a well-run corporate governance, the organization will have a structure with counterbalance which is important in the formation and variation of peer pressure. Therefore, from the macro level, it is important to first improve the corporate governance within the organizations. The improvements on corporate governance of Chinese organizations will include:

Improve the market environment to form a fair, ordered market competition environment. Fully competed environment is the important protection of forming of scientific and mature modern corporate governance culture. Through the fair and ordered

market competition as well as surviving system, we can guide the enterprises to establish a comfortable governing culture which is adapt to the environment and speed up the establishment of systems in recognizing peer pressure and related solution. For example, we can remove the policy load on state-owned enterprises, and give up the kinds of administrative protection towards state-owned enterprises. And at the same time, we can invest in building market economic order and providing a favorable outside market environment for the reform of corporate governance culture.

On the aspect of perfecting market system, we should focus on the cultivating factor market. We should firstly develop a market of governing entrepreneurs and standardize the operation system of governing entrepreneurs market. At the current stage, in the work of promoting professionalization and marketization of Chinese corporate governance entrepreneurs, it should be noticed that: The centers of operating and managing talents established in regions should be oriented as intermediate institutions strictly. These institutions cannot be administrative, and should be responsible for collecting, providing the information of operating and managing talents, providing services for the supplier and demander of talents. and promoting the flow of talents. Especially at current stage, the intermediate institutions should focus on the human resource agent and related serving activities of talents' flowing. In addition, in the process of establishing and standardizing the managers market, we should also make efforts in building reputation systems. That will requires every manager entering into the market to have a completed, real, continuous and opened performance case record and credit record.

Besides, we should improve the capital market gradually and develop various strategic investors. The detailed policy should include: Accelerate the legislative process, and establish a set of complete, mutual supportive and complement system of corporate legal governance. With the deepening of systematic reform, China's corporate governance is facing with the new emerging problems, but at the same time, the legislative process of corporate governance in China is lagging behind. Because there is no law to rely on or policies and regulations are not adapted to the environmental changes, some companies in

China, or even the listed companies meet with problems continuously. At present, the legislative department and the relevant government departments have started to speed up relevant legislation, for example, the China Securities Regulatory Commission has developed a "Basic Principles and Standards in China's Corporate Governance" and related supporting laws and regulations, such as "Operation Guide of Listed Companies' Board of Directors", and "Normative Suggestions on Relationship between Listed Companies and Controlling Shareholders", "Provisions about Setting up Independent Directors in Listed Companies", and so on. Of course, a perfect legal system of corporate governance includes laws and regulations, industry self-regulatory rules and best practice of corporate governance (sometimes also called "Principles of Corporate Governance") and other three levels. Only the three levels of standards mutually support and complement with each other, can they help to form a favorable corporate governance culture. Meanwhile, we must adapt to the new situation, to strengthen the study and development of relevant laws and regulations, such as the establishment of a company civil compensation system, establishment of shareholder derivative litigation system and class action system. Currently it should be particularly made clear the civil responsibility of market manipulation, insider trading and false statements of listed companies. Strengthen investors' awareness of self-protection. Help shareholders especially the medium and small shareholders learn to protect their legitimate interest through launching investor education activities so that there will be a powerful constraint on senior managers of the company as well as the controller of external market.

Further explore the policy culture, which fits the developing requirement of corporate governance, and establish the corporate governance system with socialism characteristics. The governor oriented has been the feature of Chinese policy culture. In the corporate governance system of planned economy time, the culture of governor oriented is shown as three points: The first is the combination of company managers and administrative officers. The second is the selection and assessment of corporate officers is finished by party and government administration, and the officers are only responsible to the party and government administration. The third is that the officers will only be promoted to higher

position rather than removed to a lower position. Obviously, that is not reasonable and cannot meet the requirement of corporate governance under market economy. And this also hinders the reforming progress of corporate governance. With the deepening of corporate governance reform, it is necessary to re-define the role and status of the party in corporate governance and then explore the new mode the party participating in corporate governance. In my opinion, the primary mission of the party organization is to supervise and ensure the execution of the party's orientation and policy in companies based on the companies' profit. China has to get rid of governor oriented mode and at the same time explore the reasonable way and form the party participating in corporate governance legally. For example, the supervising work of the party organization can be combined with the function of supervisory board.

CHAPTER 7
CONCLUSION

Ce mémoire se base sur une enquête par questionnaire pour établir un lien entre la pression des pairs et la performance, en considérant la motivation. Selon une analyse descriptive et une analyse de corrélation sur les données recueillies, certains résultats importants peuvent être mis de l'avant.

Tout d'abord, dans l'échantillon retenu, la pression des pairs existe et est maintenue à un niveau relativement élevé. La plupart des participants sentent une forte pression au sein de leur équipe. De plus, les participants donnent en général un score relativement élevé à la motivation de leur équipe. Toutefois, les participants estiment que leur propre performance n'est pas élevée. À cet égard, les résultats sont peut-être influencés par la culture chinoise spécifique.

Grâce à l'analyse de corrélation, les relations entre la pression par les pairs, la motivation, la performance individuelle et la performance de l'équipe sont exposées. La pression des pairs est liée négativement à la performance individuelle et à la performance de l'équipe. La raison réside dans l'impact négatif de la pression des pairs sur les conditions de travail individuelles et sur les performances de l'équipe par la suite. La motivation est corrélée positivement à la performance individuelle et performance de l'équipe. Parce que la motivation peut améliorer l'atmosphère défavorable causée par la pression des pairs au sein de l'équipe, elle a un effet opposé sur la pression des pairs. Un système de motivation bien géré peut aider les individus à relâcher la pression subie par les pairs et atteindre une meilleure performance individuelle et collective. La performance individuelle est fortement et positivement corrélée avec la performance de l'équipe.

De la comparaison entre les valeurs absolues des coefficients de corrélation, on peut conclure que certaines variables intermédiaires, comme la motivation, reliant la pression des pairs et la performance ainsi que la performance individuelle et la performance de l'équipe sont très importants dans la réalisation d'un projet réussi. En outre, ces variables intermédiaires sont d'intérêt pour les chefs d'équipe. Un meilleur contrôle sur ces variables permettrait de développer le potentiel de l'équipe.

Cette recherche aura permis d'établir le lien entre la pression des pairs, la motivation et la performance. Le concept de pression des pairs demeure peu étudié dans la littérature. Notre recherche contribue donc à faire avancer les connaissances sur ce phénomène. Cependant, les tests statistiques utilisés dans le cadre de ce mémoire sont assez simples. Ils permettent d'établir des relations, sans toutefois pouvoir révéler de liens de cause à effet. D'autres études, avec des tests statistiques plus poussés gagneraient à être menées. Aussi, les études pourraient s'intéresser au lien entre la performance des résultats et la pression des pairs. Dans notre étude, nous nous sommes plutôt intéressés à la performance intra-role et extra-rôle.

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APPENDIX I

Questionnaire For Team Members In A Project Team

THE FOLLOWING QUESTIONS ARE FOR THE PARTICIPANT. PLEASE
CHOOSE THE OPTION, WHICH IS APPRORIATE.

1. What's your gender?

☐ Male   ☐ Female

2. What's your age?

☐ 20-29years old   ☐ 30-39years old ☐ 40-49years old

☐ 50-59years old   ☐ 60-69years old ☐ more than 69 yeas old

3. How long you work for this project?

☐ Less than 1 years   ☐ 1-5 years   ☐ 6-10years

☐ More than 10 years

4. Are your team members from the same company?

☐ Yes   ☐ No

5. How many staff owned in this project?

☐ 1-10 persons   ☐ 10-20 persons   ☐ 20-30 persons

☐ 30-40 persons ☐ 40-50 persons   ☐ more than 50 persons

Part One: This part questionnaire is about PEER PRESSURE in a project. Please consider your answer and respond to the following statements with a level you chose.

1	2	3	4	5
I strongly disagree	I disagree	I am not sure	I agree	I strongly agree

NO.	Questions about peer pressure	Disagree		Agree		
1	Trying to do all my management tasks well is impossible.	1	2	3	4	5
2	I often lose sleep thinking about everything I have to do at work.	1	2	3	4	5
3	The pressure on me at work is almost unbearable.	1	2	3	4	5
4	If I was not so busy I would be much more productive.	1	2	3	4	5
5	Improve my performance or behavior in my work is my favorite.	1	2	3	4	5
6	In my project team, I prefer to work with the guy who works effectively.	1	2	3	4	5
7	I like to work in a small project team with less peer pressure.	1	2	3	4	5
8	I have considerable capacity to cope with many things simultaneously.	1	2	3	4	5

Part Two: This part questionnaire is about MOTIVATION in a project. Please consider your answer and respond to the following statements with 1 level you chose.

1	2	3	4	5
I strongly disagree	I disagree	I am not sure	I agree	I strongly agree

NO.	Questions about motivation	Disagree → Agree				
9	I like to be absorbed in my job most of the time.	1	2	3	4	5
10	I prefer the easy job to the challenging and difficult tasks.	1	2	3	4	5
11	I feel a sense of personal satisfaction when I do this job well.	1	2	3	4	5
12	Most of my personal life goals are job-oriented.	1	2	3	4	5
13	I believe "If you work hard, you will succeed.".	1	2	3	4	5
14	My job is just a small part of my life.	1	2	3	4	5
15	I prefer to avoid situations at work where I might perform poorly.	1	2	3	4	5
16	For me, development of my work ability is important enough to take risks.	1	2	3	4	5
17	I have very strong ties with my present job which would be very difficult to break.	1	2	3	4	5

Part Three: This part questionnaire is about INDIVIDUAL PERFORMANCE in a project. Please consider your answer and respond to the following statements with 1 level you chose.				
1	2	3	4	5
I strongly disagree	I disagree	I am not sure	I agree	I strongly agree

NO.	Questions about individual performance	Disagree Agree				
18	I help colleagues who have spontaneously high workload.	1	2	3	4	5
19	I am attentive to the well being of my colleagues.	1	2	3	4	5
20	I agree completely with the objectives of the organization and supports strongly.	1	2	3	4	5
21	Participate in team meetings or group activities bored.	1	2	3	4	5
22	I tolerate the difficulties encountered in the business without complain.	1	2	3	4	5
23	I always finish on time the work entrusted to me.	1	2	3	4	5
24	My personal goal is tied to the goal of the project.	1	2	3	4	5
25	I don't have enough skill or knowledge to do this project.	1	2	3	4	5
26	I have difficulty working in teams	1	2	3	4	5

Part Four: This part questionnaire is about TEAM PERFORMANCE in a project. Please consider your answer and respond to the following statements with I level you chose.				
1	2	3	4	5
I strongly disagree	I disagree	I am not sure	I agree	I strongly agree

NO.	Questions about team performance	Disagree		Agree		
27	There is no real warmth or affection between team members.	1	2	3	4	5
28	Conformity to the group's way of thinking and behaving is expected.	1	2	3	4	5
29	Members of the team are comfortable with each other.	1	2	3	4	5
30	Members rarely express disagreement with initial group goals.	1	2	3	4	5
31	Members fear rejection by other members of the team.	1	2	3	4	5
32	The team is accomplishing its goals.	1	2	3	4	5
33	Although team members relate well, meetings are ineffective.	1	2	3	4	5
34	Differences are not encouraged.	1	2	3	4	5
35	People seem to have very different views on how things should be done in this team.	1	2	3	4	5
36	Members of the team do not know each other well as people.	1	2	3	4	5

项目团队成员问卷

以下问题请项目团队成员填写。

请选择合适的选项进行填写。

1. 你的性别是？

☐ 男性　☐ 女性

2. 你的年龄？
☐20-29 岁　☐30-39 岁　☐40-49 岁

☐50-59 岁　☐60-69 岁　☐高于 69 岁

3. 这个项目你做了多久？
☐少于 1 年　☐1-5 年　☐6-10 年

☐高于 10 年

4. 你的团队成员都是来自同一家公司的吗？
☐是的　　　☐不是

5. 这个项目有多少成员？
☐1-10 人　☐10-20 人　☐20-30 人

□30-40 人 □40-50 人　□多于 50 人

第一部分: 这部分问卷是关于项目中压力的问卷。请考虑你的答案并将你的答案按照等级填写。

1	2	3	4	5
完全不同意	不同意	我不确定	同意	我完全同意

	压力问卷	不同意　　同意				
		→				
1	试着将我管理的任务做好是不可能的。	1	2	3	4	5
2	我经常晚上想着工作需要做的事情而失眠。	1	2	3	4	5
3	对我施予工作压力是几乎不能忍受的。	1	2	3	4	5
4	如果我不是很忙的话,我会更加有成效。	1	2	3	4	5
5	我喜欢在工作上改进我的表现和行为。	1	2	3	4	5
6	在项目团队中,我更喜欢与有效率的人合作。	1	2	3	4	5

7	我喜欢在压力小的，规模小的项目团队中工作。	1	2	3	4	5
8	我有能力同时应付很多事情。	1	2	3	4	5

第二部分： 这部分问卷是关于项目中动机的问卷。请考虑你的答案并将你的答案按照等级填写。

1	2	3	4	5
完全不同意	不同意	我不确定	同意	我完全同意

	动机问卷	不同意		同意 →		
9	我喜欢花大部分的时间在我的工作上。	1	2	3	4	5
10	比起有挑战性和有难度的任务，我更喜欢做轻松的工作。	1	2	3	4	5
11	当我做好这份工作，我觉得有成就感。	1	2	3	4	5
12	我大部分的人生目标都和工作挂钩。					

		1	2	3	4	5
13	我相信："只要你努力，你就能成功。	1	2	3	4	5
14	我的工作只是我人生的一小部分。	1	2	3	4	5
15	我会避免让我表现不佳的工作情况出现。	1	2	3	4	5
16	对我来说，培养我工作能力是最重要的。	1	2	3	4	5
17	我和我现在的工作关系非常牢固，很难打破。	1	2	3	4	5

第三部分：这部分问卷是关于项目中个人表现的问卷。请考虑你的答案并将你的答案按照等级填写。

1	2	3	4	5
完全不同意	不同意	我不确定	同意	我完全同意

	个人表现问卷	不同意 → 同意				
18	我帮助自己给自己很大工作量的同事。	1	2	3	4	5

19	我很关注员工的福利。	1	2	3	4	5
20	我的目标与组织的目标完全相同并强烈支持。	1	2	3	4	5
21	参加公司的会议或活动非常无聊。	1	2	3	4	5
22	我容忍工作中遇到的困哪，不抱怨。	1	2	3	4	5
23	我总是按时完成委托给我的任务。	1	2	3	4	5
24	我的个人目标和项目目标是紧紧联系在一起的。	1	2	3	4	5
25	我没有足够的技术和知识来完成这个项目。	1	2	3	4	5
26	我在这个团队工作中有困难。	1	2	3	4	5

第四部分：这部分问卷是关于项目中团队表现的问卷。请考虑你的答案并将你的答案按照等级填写。

1	2	3	4	5
完全不同意	不同意	我不确定	同意	我完全同意

	团队表现问卷		不同意		同意	
27	在团队成员中没有真情和温暖可言。	1	2	3	4	5
28	要求符合团队方式的思路和行为。	1	2	3	4	5
29	团队成员之间相处融洽。	1	2	3	4	5
30	成员很少出现与团队最初目标不一致的意见。	1	2	3	4	5
31	成员害怕被团队其他成员拒绝。	1	2	3	4	5
32	团队成功达到了他们的目标。					
33	团队成员之间相处不错，但是会议没有成效。	1	2	3	4	5

34	不同的意见是不被鼓励的。	1	2	3	4	5
35	团队中成员之间在如果完成事情上有不同的看法	1	2	3	4	5
36	.团队成员相互不够了解。	1	2	3	4	5