

**Personnel Identity, Organizational Commitment and
High Performance Working Practice System
in Chinese Power Companies**

QING Song

Thesis submitted as partial requirement for the conferral of

Doctor of Management

Supervisor:

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Declaration

I declare that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university and that to the best of my knowledge it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed

Date 2013. 6. 20

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Abstract

With the in-depth reform of China's power enterprises, the management of multiple personnel identities has become a vital task during the process of enterprise renovation. Based on social identity theory and vast interviews and survey in a power companies, this paper explores the relationship between the various personnel identities and organizational commitments, and verified the important moderating function of the High Performance Working Practice system (HPWP system) on the relationship between personnel identity and organizational commitments. The research results have shown that: First, personnel identity has a significant impact on the organizational commitments of enterprise personnel, and a significant diversity has shown among the three dimensions of personnel identity. Second, this research also indicates that a fair management procedure, overall and reasonable salary system and the publication of information related can upgrade significantly the sense of participating, justice and security of employees, and consequently the level of the organizational commitments will be increased. Third, for workers serving in the companies implementing HPWP system, their level of organizational commitments is significantly higher than that of the workers serving in those without HPWP system. Fourth, the evaluation of workers on the HPWP system implemented in the companies they serve plays an important up-regulation role in the relationship between personnel identity and organizational commitments.

This research explores a specific but prevalent phenomenon in China transitional economy, where employees are systematically given different identities which supply a good opportunity to broaden the social identity theory by combining it with organizational commitment. The research on the moderating role of HPWP system contributes much in practical management by indicating that a well implementation of HPWP system could substantially upgrade the level of organizational commitments of employees and beneficial to the long-term enterprise development, especially under China current situation in which the personnel identities can't be simply unified in short term.

Key Words: Organizational Commitment; HPWP system; Personnel identity; Employment Relationship

JEL: M12

Resumo

Com a reforma profunda das empresas energéticas na China, a gestão das múltiplas identidades do pessoal tornou-se uma tarefa determinante na renovação das empresas. Baseando-se na teoria da identidade social, em entrevistas aprofundadas e na aplicação de um questionário, esta investigação explora a relação entre as diferentes identidades do pessoal e o compromisso organizacional. Verifica-se ainda a função moderadora dos Sistemas de Recursos Humanos de Elevado Desempenho (SRHED), na relação entre as identidades pessoais e o compromisso organizacional. Os resultados da investigação evidenciam: primeiro que a identidade pessoal possui um impacto significativo no compromisso organizacional e uma diversidade significativa entre as três dimensões da identidade pessoal; segundo, a investigação indica que procedimentos justos, um nível salarial razoável e a publicação de informação relativa pode incrementar o sentido de participação, justiça e segurança dos empregados e conseqüentemente aumentar o nível de compromisso organizacional; em terceiro lugar, empregados de empresas que implementaram SRHED apresentam níveis de compromisso significativamente superiores do que empresas que não implementaram SRHED. Em quarto lugar a avaliação que os trabalhadores fazem dos SRHED implementados nas empresas em que trabalham jogam um papel importante de regulação entre a identidade pessoal e o compromisso organizacional.

Esta investigação explora o fenómeno específico mas frequente na transição económica da China, em que são atribuídas diferentes identidades aos trabalhadores permitindo combinar a teoria da identidade social com o compromisso organizacional. A investigação sobre o papel moderador dos SRHED contribuem para a gestão prática indicando que uma boa implementação de SRHED podem contribuir para aumentar o nível de compromisso organizacional dos empregados e beneficiar o desenvolvimento das empresas no longo prazo, sobretudo na presente situação da China na qual, no curto prazo, não podem ser unificadas as identidades pessoas dos trabalhadores.

Palavras Chave: Compromisso organizacional; SRHED; Identidades pessoais; Relação de emprego

JEL: M12

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Chapter 1: Introduction

1.1 Research Background

Power enterprise refers to the enterprise that obtains Power Business License pursuant to laws and undertakes the basic responsibilities for supplying safe, reliable and sufficient power and services for customers. Power enterprise is not only the stated-owned key enterprise that concerns national energy security and national economic lifeline, but also undertakes the major responsibilities for maintaining and increasing the state-owned assets, enhancing national economic strength and industrial competitiveness.

Human resource management, as the core of modern enterprise management, has been accepted by more and more enterprise managers and the corresponding Human resource management practices have already penetrated into daily production and operation activities. However, power enterprises have lagged far behind many enterprises both at home and abroad whether the cognition degree of Human resource management theory or the implementation degree of Human resource management practice for various reasons or as limited by many conditions. As a direct consequence that power enterprises will be in a disadvantageous position in market competition and the development of them will be eventually affected if such bottleneck is not improved as soon as possible.

With new breakthrough in reform and new changes in development, especially the significance impact of social, political and cultural factors, renovation, development and stability will become the major contradictions at different history period and different history conditions. This kind of contradictions require Human resource managers of enterprises to rethink the role of enterprises' human resources and value added issues from an entirely new perspective and to establish new working mode and process, thus improving the competitive ability of enterprises. Therefore, a new round of reform in employment form of power enterprises is imperative. From analysis, the reform of China's labor employment will lead enterprise employment to transform to marketization, standardization, personnel agency system (personnel management outsourcing) and personalization. The content of labor laws and regulations will be perfecting; the magnitude to integrate with international labor standards will be increasing and the operability will also be growing. At the same time, the

external environment of power enterprises under globalization has also quietly changed. In view of the actual situation of power enterprises, China's power enterprises will experience triple changes in complete separation of main and secondary, deepening electricity price reform and transforming regulation mode. The changes in external environment promote power enterprises to attach importance to the guarantee of employees' rights and reasonably develop and utilize human resources.

To deeply understanding the human management problems of China's power enterprises, we choose State Grid Company as a case in which we examine its human management practices and identify the problems caused by its multiple employment modes. State Grid is the largest Chinese state-owned enterprises headquartered in Beijing and ranked 3rd on the 2011 Fortune Global 500 list of the largest companies in the world. In recent years, it has started personnel reform by establishing fair and rational, mutually beneficial and win-win, harmonious and stable new socialist labor relations, which stimulates employee's enthusiasm, subjective initiative and creativity and gain employee's loyalty and commitment. However, for a long time, State Grid Company and other power enterprises have formed many employment modes (including workers in enterprises owned by the whole people, workers in enterprises of collective ownership, labor workers and rural electrician, etc.). The coexistence of a variety of employment modes is result from the transition of state-owned enterprises from planned economy to market economy, which is now increasingly becoming a serious problem that may hinder corporate's development.

While the multiple employment modes had played a stimulating role in improving employee's performance, they have brought increasing negative effects.

Scattered parallel operation of employment modes in power enterprises have largely aroused the injustice among different types of employees and affect the cohesive force and working performance of enterprises..

In recent ten years, State Grid has been rapidly developed. With the expansion of State Grid, the rapidly increasing of employee leads to the more serious conflicts about multiple employment modes.

Limited by employment plan, the long-term workers in power enterprises have, been negatively increased and the newly employed personnel are not enough to make up the gap of natural reduction of personnel. As a consequence, it is unable to provide necessary maintenance personnel and personnel reserve for running those newly added power grid equipments. To this end, establishment units have to dispatch workers in enterprises of

collective ownership to participate in practical production and had to recruit labor workers from society to fill vacancy and to satisfy the demands of safe production and quality service. At the same time, limited by the employment system and the related cost, employers have to deal with the labor relations of those personnel with collective or diversified enterprises and undertake the labor cost of those personnel, or try by hook or by crook to solve the salary problems for those personnel from controllable cost or maintenance cost of rural power grids. As a result, “confusion of responsibilities” of workers in enterprises of collective ownership, rural electrician and other personnel in employers’ post occurred. Meanwhile, labor workers and rural electrician require equal pay for equal work and the called for signing labor contract.

For the reasons given above, to straighten out the labor relations and carry out human resources renovation, State Grid Company (State Grid Company in B Province) have made effort to straighten and standardize the employment situations, specified that only two employment modes are allowed for the posts of employers- Long-term workers and labor workers. In 2007 and 2008, Grid Company in B Province carried out the pilot of Comprehensive Reform for Human resource Management in D Power Grid Company and C Power Grid Company to break the "identity" boundary and incorporate a variety of labors into the same set of post system and compensation system management, which preliminarily solved the post promotion channels and salary problems and avoid the contradiction of unequal pay for equal work.

However, the problems of employment and allocation mechanism of most power enterprises, at present, are still prominent. On employment allocation, long-term workers of power enterprises have been negatively increasing in recent years, but the overall redundancy and structural imbalance of vacancies in production line in enterprises is very outstanding, especially serious insufficiency of technical and skilled talents in production and marketing line for the expansion of production scale, introduction of labor employment and a large amount of newly added county-level power enterprises managed by holding. As a consequence, the promotion of fixed member to reach the mark is difficult. On employment distribution, serious redundancy in power enterprises in central cities and overall vacancies in power enterprises in remote areas are present. For the latter enterprise, they need workers, but there are no workers willing to work there; although there are workers to come there, the enterprises are unable to remain them. On employment management, after the diversification of employment mode, confusion of responsibilities is more and more common and the risk of equal pay for equal work and standardized employment is larger with the increasing labor

workers and decreasing long-term workers of employers.

In order to provide some answers for these problems happened in many power enterprises, we use State Grid Company as a same case and try to explore how their multiple employment modes work in their companies, how these employment modes influence personnel identity, and how these personnel identity affect employee's organizational commitment. In addition, many prior studies demonstrate that high performance work practice system (HPWP) is a core concept in the area of strategic human resource management (SHRM) (Becker and Huselid, 1998). HPWP is significantly related with employee's commitment and performance (Huselid, 1995). Therefore, we bring the concept of HPWP into our model and explore the moderator effect of HPWP on the relationship between personnel identity and organizational commitment.

1.2 Research Goals

Based on the above background, this paper intends to find how different types of personnel identity related with organizational commitment and how HPWP moderator this relationship. We hope the findings of this study could provide support for the reform of State Grid's human resources development. We first summarize the problems of State Grid's Human resource management experience and establish taking post management as core, standardize post setting system, perfect new salary distribution system, dredge the channel of personnel career, change identity management to post management, improve Human resource management level of power enterprises, realize the organizational commitment of electrical personnel and finally propose concrete solutions against the problems in Human resource management concept, labor employment management system, labor contract management, labor employment mode, employment management on labor workers and rural electrician, personnel management for diversified enterprises under universal support, equal pay for equal work, coordination mechanism of labor relations and other aspects of power enterprises through analysis of problems in Human resource management of power enterprises. Research contents are as follows:

Chapter 1 is introduction, mainly demonstrating research background, reasons for selecting the topic, purpose of selecting the topic, research methods and research phases, problems to be solved and innovation points. Chapter 2 is overview of theories and literature. This part is mainly to define personnel identity, review, analyze, generalize HPWP system,

organizational commitments, HPWP system and organizational commitments, etc. Chapter 3 is the introduction of research objects, mainly demonstrating the development history, current situation and origin of research problems of enterprises involved in this paper, explaining and personnel identity with special background of China's state-owned enterprises. Chapter 4 is the model and hypothesis proposal, putting forward the research frame and hypothesis to be proved in this paper in accordance with relevant theories and in combination with the existing model. Chapter 5 is research methods, specifically analyzing and describing the definition of variables, research objects and data collection, sampling description and statistics, data analysis method and questionnaire analysis, etc. Chapter 6 is research results and discussion, mainly analyzing and discussing the key theories of paper, namely, the impact of HPWP system on organizational commitment, impact of control variables on organizational commitment and moderating effect of personnel "identity" and then obtaining research results. Chapter 7 is research conclusions and outlook, mainly summarizing the research results of this paper, putting forward Human resource management strategy and suggestions of power enterprises, obtaining the reform revelation of labor employment mode of power enterprises and pointing out the research innovation and insufficiency of this paper.

1.3 Research Methods

This paper adopts the combination of literature overview and questionnaire investigation to carry out comprehensive research. Placing HPWP system of enterprise in certain theory background for research fully explains the academic significance of study.

In this paper, we will comprehensively use multiple research methods on the basis of theoretical analysis and deepen the understanding of enterprise's HPWP system through the introduction to relevant research from domestic and overseas scholars to lay a good theory foundation for the research on HPWP system of power enterprises. In addition, we will measure organizational commitment from emotional commitment, continuance commitment and normative commitment through literature review and theoretical analysis and form measurement questionnaire of HPWP system and organizational commitment according to the existing mature measuring scale. On this basis and in combination with the history background of China's state-owned enterprise, we will define enterprises' personnel identity and issue questionnaire to personnel with different identities. At the same time, we will collect a large amount of public information of relevant enterprises and verify the proposed hypothesis and effectiveness of model with empirical research methods.

1.4 Innovation Points

Firstly, the relationship between the recognition of organization to personnel (namely, different personnel identity in this paper) and recognition of personnel to organization reflects the interaction between organization and personnel, which is further verified by the moderating effect of HPWP system. Special personnel identity of China's state-owned enterprises enriches and expands the existing literature, which has certain theoretical value.

Secondly, power enterprise has a long history and experienced various policies of national labor and personnel renovation. Furthermore, the labor employment is diverse, so the research on Human resource management strategy has important guiding significance to the enterprise.

Thirdly, A Group Power Grid Company (Power Grid Company in B Province) firstly made the reform in the industry throughout the country, and has specific reform measures and rich pilot experience, so its research conclusions can provide useful reference for other enterprises.

Chapter 2: Literature Review

2.1 Social identity

Social Identity Theory provides new thoughts to explain group behavior. “Social Identity” originally means identity. In Chinese, the word “identity” means the social status and qualification of a person. Social Identity Theory thinks that social identity is an important component of self-concept. An individual affects his own social perception, social attitude and social behavior through the cognition to members who belong to the same group with him (Hogg & Tindale, 2005). Individual identity and social identity are the bases of distinguishing interpersonal relation and intergroup relation (Tajfel & Turner, 1986). In interpersonal communication, behaviors are controlled by personality variable; in intergroup communication, behaviors are controlled by group sorting process from individual. Individual identity means individual’s self-recognition with some peculiarity. Thus individual identity lets individual confirm in space-time that he and himself are the same person rather than anyone else. Social identity is individual recognition that he stays in a social group and a social category. Thus social identity lets individual recognize and intensify that he is same to or similar with other people in a social category, but different with other people. In social communication, people always try to get or maintain active social identity (to promote their self-esteem). To a great extent, the active identity comes from the advantageous comparison between in-group and related out-group. When people are unsatisfied with current social identity, they can choose to leave the group or find ways to achieve active identity. The creator of Social Identity Theory (Tajfel, 1978) defined social identity as individual cognition of the qualification possessed by the members who belong to the same group with him, and the qualification’s importance in value and affection.

2.1.1 Employment System of SOEs and Personnel identity

The transformation of SOE in China is pushed out as the reform and improvement after reform and open, which means the SOE bring part of the market mechanism to lead to the situation which carries out both plan and market mechanisms at the state-owned economic mechanism in general. The “two-track system” in SOE indicates as the “two-track”

employment in employment system. The reform of employment system in SOE can be divided into three stages since 1987: the first stage is unitary employment system from 1987 to 1985, i.e. regular employment system; the second stage is the transformation from regular employment system to binary employment system from 1986 to 1991, i.e. the appearance of “two-track” employment system; the third stage is the situation which dominated by “two-track” employment system, and at the same time diversification of employment form and labor relation also exists. The employment forms in SOE include employee, contractor, temp and dispatched labor under this employment system. Each employment form has very different origin and significant belongs to different group.

Employee, also called “regular worker”, has the features shared by conventional “regular worker”. They are employed for long term and have no specific service time that form a stable and normative labor relation with SOE and have a high standard in working hours, income, working environment, social insurance and career development, etc. There are three sources of employee in SOE: the first is the old personnel are directly transited to employees during SOE transformation. Though all personnel are required to sign labor contract, there are many personnel avoid the limitation of labor contract. The second is the open recruitment which leads SOE to employ the excellent people and sign official labor contract. The quota of people is very small. The third is the internal recruitment in SOE which is usually left for “relational group” such as employees’ families.

Contractor, also called labor workers, is the laborer who signs labor contract with SOE to determine the obligation and right of two parties through the employment form which combines the responsibility, power and interests. Most of these employment personnel is recruited in society and settled on positions which need a certain period time of usage. They are divided into unskilled labor and skilled labor. The contract can be long-term and short-term according to the demand of SOE. In common the contract period is three years or five years. The labor relation between contractor and SOE is lower than employee and higher than temp and dispatched labor and so on. It is possible for them to transit to employee if they work for a long time and have good job performance.

Temp is a kind of worker who is recruited and appointed with the approval of labor department for a specific service life because of the temporary and seasonal tasks in SOE. The labor relation is unstable and the treatment is lower than employee, labor worker or contractor without welfare and social insurance. There is a kind of unstable part-time temp who only need the oral agreement and can stop the employment without any economic compensation.

They can come and go as soon as called.

Dispatched labor refers to the staff in labor dispatch agency signing labor contract and dispatched to work in other Employers. This employment form forms a complex relation between Employer, labor dispatch agency and labor worker. There is labor relation and no real position between labor worker and labor dispatch agency, while there is real position and no labor relation between Employer and labor worker, i.e.” with labor relation and without working; with working and without labor relation”. Dispatch employment is officially legalized as a flexible and complementary employment form after issued Labor Contract Law in 2007. More and more enterprises employ dispatched labor to avoid relevant legal liabilities which leads to the informal prosperity of labor dispatch and the mainstreaming of labor dispatching employment. During this procedure, SOE act as the pioneer to employ many dispatched labor in many important and long-term positions which constitute main part of the “two-track” employment system. The reason that labor dispatch is popular on SOE is that its flexibility and convenience saves a lot of labor cost for them. Compared to the employee, the dispatched labor's salary, welfare and social premiums are lower, and they are easy to be ordered. Once accident happens, enterprise can pass the responsibility to labor dispatch agency and avoid legal liability. Besides, enterprise can reduce the stafftrimmer without undertaking any legal liabilities and economic compensation.

From above SOEs’ employment history and employment forms which systematically divides workers into different category, since categories are defined by prototypical characteristics abstracted from the members (Turner, 1985), providing the individual with a systematic means of defining others, thus these employment forms indicates completely different identity, according to Social Identity Theory (Tajfel, 1978) , we defined these different employment forms as personel identity in this paper.

2.1.2 Distinctions of Personnel Different Identities in SOE

The starting point of “two-track” employment system in SOE is to adapt the needs of marketization reform of SOE, which presents a flexible, diversified and effective image. It develops a graded and discriminatory employment system, however, because of the incomplete social security system and the uncommitted law of labor rights protection. This employment system causes the giant gap between “in system” and “out system”, and the big differences in income distribution, political rights and other aspects Among groups “in system” represented as employee and “out system” represented as contractor, temp and

dispatched labor.

The most obvious and direct inequality between the personnel in/out system of SOE is indicated at the payment of labor. The basic wage of personnel in system is 3 to 4 times as the basic wage of personnel out system. The great attraction of SOE to workers not only depends on the increase of basic wage, but also the better welfare compared to the non-stated-operated economic units. Because of the disguised welfare income compared to wage income, it becomes the major method to increase the income of personnel “in system” in many SOE. Especially the SOE in monopolized industry gain fat profit rely on strong political advantage. On the condition of independent allocation, the welfare income is breathtaking. The welfare income of personnel “in system” is unattainable for workers “out system”. The differences between them are enormous. Workers participate in working and enjoy the achievability, who not only pursue the payment to meet the demand of material life, but also gain attention, voice and political rights. They expect opportunity for career development and make steady progress in career path. Regarding these aspects, personnel in/out system “receive different treatments. In aspect of political rights, employees have various kinds of voice and activity fees to take part in rich employee activities. The informal employees such as temporary temp and dispatched labor can rarely participate in labor union because of the awkward situation; it is possible for contractor and long-term temp to become members of labor union, while it is hard for them to get participation rights, supervision rights, and the rights to vote and to be elected as employee. In general, personnel “out system” are short of interest expression representation mechanism and effective channels and usually “are informed”, and belong to the “silent majority” in enterprises. In the aspect of career development, there are different trains and promotion system for personnel “in/out system”. The former have educational training fees, more training opportunities to increase the professional knowledge and skills and large development and promotion spaces through their efforts. It is hard for the latter to work out a clear personal plan of career development. They are lack of employment security and satisfaction and impossible to overcome the obstacle of “authorized size”. The differences and formation history of employment status

2.1.3 Four Types of personel identities in Power Enterprises

There are many employment forms such as workers under ownership by the whole people, collective workers, labor workers and rural electrician, etc. in power supply enterprises. Workers under ownership by the whole people refer to employees signing labor

contract with power supply enterprises who are regular with high stability. Collective workers are also the employees signing labor contract with power supply enterprises who are relative regular with relative high stability. Labor worker is short for dispatched labor. This kind of employment is that workers sign labor contract with labor dispatch agency registered in administration for industry and commerce and are dispatched to Employer, i.e. power supply enterprises to provide labor service with the approval of labor administration department. There is stable labor contract relation between labor worker and labor dispatch agency instead of electric power bureau. Therefore the stability of working relationship is lower than collective worker for electric power bureau. Rural electricians refer to the village electrician providing service for rural electricity supply and a group of administrators in power management stations before electricity reform. They are a kind of dispatched labor now who are dispatched to power supply enterprises and responsible for the construction, operation, maintenance, repair of line with voltage no more than 10 KV in village, and electricity service and electric charge collection. They do not sign labor contract with electric power bureau, and the stability of labor relation with electric power bureau is the lowest.

2.1.4 Challenges facing with SOE's employ system

The Labor Contract Law, put into force on January 1, 2008, embodies the idea of securing fair labor, equal employment and equal pay for equal work and put significant impact on power enterprises in labor and employment, salary distribution, position setting, social security as well as education and training system.

On one hand, the Law increases the cost and difficulty of human resource management. If the HR management system couldn't match with the Law, it would put the power enterprises on huge legal risk in terms operation and management. On the other hand, the issuance and implementing of the Labor Contract Law will accelerate the reform of employment and distribution system so that to promote the construction of professionalization, refining and standardization to realize the HR management goal of "proper scale, reasonable structure, innovative mechanism, good quality, standard management, improved environment".

On the other hand, newly recruited college graduates and demobilized soldier can hardly fill the gap caused by the enterprises' scaling up while staff naturally reducing. Except for planned recruiting, to alleviate the disparities between power construction, operation and management with the shortage in labor, these enterprises have adopted marketized

employment ways including labor dispatching, provisional employment and business outsourcing, which helped ease the tension caused by labor shortage in some extent. However, the Labor Contract Law conducts strict limits on the management pattern of diversified employment, which causes difficulty for the unplanned employment, as well as legal risks as problems in actual labor contractual relation, and same work with different pay.

2.2 Organizational Commitment

The research of personnel commitment action was begin in 1960s and was developed in the next several decades. The concept of organizational commitment was first introduced by Becker (1960), he viewed commitment as a kind of feeling and aspiration which was produced along with the increasing endeavor of personnel putting into organization and made employees to be willing to anticipate in organizational each work. Here from Side-bet Theory was proposed which insists that the employees would lose all kinds of welfare once leaving the organization, such as house, pension, and allowance and so on. This welfare would increase as more time, energy or money was put into organization. Meanwhile, the skill obtained by spending much time might not be used which formed the cost of leaving organization. Once personnel left the organization, he (she) had to burden these cost.

Though the concept of Organizational Commitments was first put forward by Becker (1960) but he didn't carry out further research on this concept. Buehanan (1974) and Porter (1976) et al had refined Organizational Commitments based on their new research of emotional dependence of personnel to their organization. In the probing of influencing elements on Organizational Commitments, they thought the elements of influencing affective commitments were more widespread than the Becker's instrumental commitment, the elements like salary, personnel status, sense of responsibility, freedom of work and the opportunity of promotion would influence personnel commitments. But comparatively speaking, the age of staff and working life are the more important elements.

Porter et al (1976) had researched the relationship between affective commitments and job satisfaction, two-stage (superior and the same level) assessment and promotion. The research pointed out that the personnel with high commitments was presented as the following three features: (1) Approving the goal and value of organization; (2) Putting as much as energy into each organization work; (3) Being proud of becoming a member of organization. The level of origination commitments and the personnel evaluation from

superior and the same level and the personnel's own evaluation of its work, reward and promotion is positive correlation.

To evaluate the character of personnel psychological commitment effectively, Ritzer and Trice (1969) worked out the Ritzer-Trice measuring scale (HS-S). Hrebiniak and Alutto (1972) revised the measuring scale and formed Hrebiniak-Alutto measuring scale (HA-S). While the organization commitment questionnaire (OCQ) was developed by Porter and Mowday has provided effective tools for latter research of organization commitment. These measuring scales are used to measure the psychological commitment of personnel but they are different in the measuring context in fact, and they also show different researchers with different definition and understanding of organization commitment.

According to the previous researches, a kind of scale is formed in summary of them by Meyer and Allen(1990). After one-dimension model and (Porter, 1976) and two-dimension model (Angle & perry, 1981; O'Reilly & Chatman, 1986)), the present wide-accepted three-dimensions model is gradually developed, which are affective commitment, continuance commitment and normative commitment. Meyer and Anen (1990) have an overall analysis and review on the previous research results on normative commitment by many researchers and propose the three-factor model of commitment on the basis of their own practical researches. They explain the organizational commitment in terms of reasons that they want to stay, they have to stay or they need to stay for personnel's stay in an organization. The organizational commitment is defined a kind of psychological state presenting the relationship between personnel and organization that implies whether personnel are determined to stay in the organization. Three factors are as followed respectively:

Firstly, affective commitment is the individual personnel's identity degree on organization, which includes the belief and acceptance for the goal and value of organization, the willing to devote to organization and to work for it. Personnel emotionally identify and take part in organization. And the reason for those with high affective commitment is that they want. There are some similar opinions: Kanter says that when individual psychologically and emotionally identify on organization, they will stay in it (Kanter,1968). Porter etc. and Morrow etc. both believe that organizational commitment is the relative degree of personal identity on organization and devotion. It has the following three features: (1) a strong belief and acceptance for the goal and value of organization. (2) Willing to devote intellectually. (3) Desire to be continuously part of organization.

Secondly, continuous commitment is individual's demand for continuous work in

organization, which is an accumulated dimension. It is a kind of commitment that they have to stay in the organization for not losing the exchanged treatment after several years devotion on the basis of personnel's cognition on losses after leaving it. The commitment is built on interest and has a strong feeling of trade. With time accumulated, the personnel working in it will get a satisfactory salary and pension. Besides, they are able to master a specific technology of it and develop good interpersonal relationship in it. They are in the possess of a higher qualified position, etc. If they quit, all of these will be gone. And due to the possibility that they are not necessarily able to find out a better organization than the present one, the difficulty of quitting increases. In a word, in order to maintain all of these personnel have to stay in organization.

Thirdly, normative commitment is the influence of social regulation on the degree of individual's obedience to organization. It reflects the personnel's compulsory feeling on their further stay in it. It is a kind of commitment that they stay in organization with the influence of the sense of social responsibility formed by the long-time social influences.

After the proposal of three-factor organizational commitments model by Meyer and Allen (1990), it has widespread effects. Then a large amount of researches are made to test its universality. The main arguments are following (Zhangmin and Zhangde, 2002): ① in empirical research on affective commitment and normative commitment it is found that they are highly related. They overlap in definition. Even though these two definitions are proposed by Meyer and Allen (1990), they are indicated to overlap inside between them. But the theoretical existence of normative commitment appears the evidences are not accurate enough. ② When the measurement of normative commitment built up by Meyer and Allen is carried out in cross-cultural research, the meaning of bi-directionally translated words is difficult for the surveyees to understand. ③ The results of different empirical research are not in accordance as to the problem whether continuance commitment can be further divided into two factors: lack of chance and individual losses.

Ling Wenqing (2000) etc. made further study on organizational commitments of domestic enterprise personnel, based on which he has put forward five-factor model of organizational commitments on enterprise personnel in China, namely, affective commitment, normative commitment, ideal commitment, economic commitment and opportunity commitment. Affective commitment is willingness to make contribution to survival and development of organization regardless of rewards with organizational identification and profound feelings; ideal commitment is emphasizing growth of individuals, pursuing

achievement of ideals, paying attention to the probability of exercising of personal specialty in the organization and providing of various working conditions and learning for improvement as well as opportunities of promotion to facilitate achieving ideals; normative commitment is that attitude and behavior expression of enterprise are guided by social norms and work ethic with responsibility for the organization and fulfilling of one's due responsibility and obligation for the organization; economic commitment is staying in the organization because one is afraid that the organization will suffer economic loss; opportunity commitment is that he stays in the organization for the root cause of failure to find any other satisfactory working organization or no opportunity of finding work owing to his low technical levels. Therefore, five-factor organizational commitment put forward by Ling Wenqing (2000) has big relationship with three-dimensionality organizational commitment by Meyer and Allen (1990). Connotation of affective commitment and normative commitment in the five-factor structure is in agreement with that in three-dimensionality organizational commitment. Economic commitment and opportunity commitment are two factors which are divided from continuance commitment in China and ideal commitment is unique characteristic in China. The ideal commitment is systematic and profound in the domestic research on organizational commitment. Five-factor structural model has realistic meaning for guiding personnel management practice of Chinese enterprises. Further empirical research is needed on the issue whether the theoretical model applies to all Chinese enterprises.

In accordance with need of research of the paper, we adopt three-factor model by Meyer and Allen (1990), namely, organizational commitment mainly consists of affective commitment, continuance commitment and normative commitment.

2.2.1 Influencing Factors of Organizational Commitments

Steers (1977) investigated the degree of correlation between organizational commitments and variables such as individuals, work, roles and organizational characteristics. Eisenberger(1986) put forward according to norms of mutual benefits and communication theory that care and support felt by members from the organization is key factor of forming organizational commitments. Mathieu and Zajac(1990) conducted element analysis on main research of organizational commitments and classified relevant factors of organizational commitments into eight types: apart from stimuli, satisfaction of work and working performance, other types such as personal variable, work pressure, characteristic variable of work, team and leader relationship, characteristic variable of organization were deemed to

cause organizational commitments.

Recently more research have focused on effect on organizational commitments of sense of organization support by the personnel and held that sense of organization support is main intervening variable. Liu Xiaoping and Wang Chongming (2002) built a model for formation mechanism of organizational commitments based on social exchange. The formation mechanism of organizational commitments contains two main systems: judgment and comparison system of organization support and attributing and generation system of organizational commitments. The former mainly judges the size of organizational support and the latter explains and weighs the comparison results.

The paper makes primary conclusion and classification of influencing factors of organizational commitments based on previous relevant research (Steers, 1977; Meyer and Allen, 1991; Ling Wenlun, etc. 2000; Liu Xiaoping and Wang Chongming, 2004). There are mainly three types: ① organization factor, mainly including organizational support, organizational dependability, justice, acceptance degree of new opinions and new thoughts by the management level and collective work ethos, etc. ② work factor, including challenge of work, degree of clearness of position, degree of clearness of objective and difficulty of objectivem, etc. ③ personal factor of personnel, including age, length of service, educational level and working experience, etc.

2.3 HPWP system and Organizational Commitments

Ferris, etc. (2001) held that main factors influencing enterprise performance is effect on personnel behavior of human resource management practice of enterprise and some corresponding empirical research had proved organizational citizenship behavior and organizational commitments of personnel had direct influence on enterprise performance. American scholars held that HPWP system had direct influence on enterprise performance which is realized through member relationship and behavior of the organization (Wright Dunford & Snell, 2001).

Champon and Porter (1976) once investigated interests in life and organizational commitments of blue collar and white collar, only to find: higher organizational commitment is, higher working performance is (Jing & Xiao-hua, 2009). Johnston investigated developing and testing of comprehensive model of organizational commitments in the sale environment,

only to find: organizational commitments are highly responsible and significant factor influencing personnel change and performance (Johnston, 2001). Personnel with low organizational commitments have low working quality (O'Driscoll & Randall, 1999; Randall, Cropanzano, Bormann, & Birjulin, 1999). In terms of managers at basic level, their working performance has positive correlation with affective commitment and has negative correlation with continuance commitment (Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989). On the whole, relationship between affective commitments and working performance of personnel is extremely weak, which is not that obvious as that between resigning and absence (Mathieu & Zajac, 1990). The conclusion that commitment to organization is unrelated to working performance of personnel and to the superior influences working performance of personnel (Becker, Billings, Eveleth, & Gilbert, 1996) has been confirmed by the research (ChenTsui & Farh, 2002).

Organizational commitments have remarkable effect on organizational citizenship behavior of personnel (Williams & Anderson, 1991). Research results of Shore & Wayne (2004) indicated that affective commitments and organizational support consciousness and organizational citizenship behavior are positively correlated and continuance commitments and organizational citizenship behavior are negatively correlated. In the meanwhile, the research also indicated that organizational support consciousness can explain variation of organizational citizenship behavior better than continuance commitments, namely, organizational citizenship behavior is influenced deeper by organizational support consciousness in organizational commitments. According to research of some researchers, especially research of Feather in Australian teacher groups indicated organizational commitments have strong correlation with organizational citizenship behavior (Feather & Rauter, 2004). Furthermore, Meyer reviewed antecedents, results and relevant variables of organizational commitments with the method of element analysis, only to find organizational commitments have positive correlation with organizational citizenship behavior. In particular, correlation between affective commitments and organizational citizenship behavior is stronger (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

Model of human resource value put forward by Dyer, etc held that good human resource management practice influences working attitude and behavior of personnel and further causes a series of chain reaction. Good working attitude and behavior will influence output of personnel; improvement of output of personnel can enhance productivity and product quality of enterprise without less loss, thus improving output of enterprise; improvement of enterprise

output is reduction of costs and increasing of enterprise profitability with respect to finance; as increasing of enterprise profitability improves financial situation of enterprise, finally share price of enterprise increases and enterprise assets appreciate in securities market. Ultimately, enterprise performance is improved (Dyer & Reeves, 1995).

Chinese scholars hold that HPWP system will influence improvement of organizational commitments of personnel and prompt enterprise personnel to generate high sense of attachment and identity for the organization, finally producing favorable effect on development of enterprise (Qi Zhenjiang & Zhu Jiping, 2007). Zhao Shuming, etc. found in the research on more than 200 enterprises in Hong Kong that HPWP system will indirectly influence market performance through personnel performance (Zhao Shuming & Liu Hong, 2002). Yang Dongtao discussed correlation analysis of HPWP system and affective commitments of personnel and concluded in investigation analysis of more than 700 enterprises in Shanghai, Guangdong and Jiangsu that HPWP system and affective commitments of personnel are remarkably correlated. Proper and effective human resource management practice can improve affective commitments of personnel and make more contribution for the enterprise (Yang Dongtao, Chen Tongyang & Xu Guohua, 2005). Chen Jinlin, etc. discussed the issue of introducing intervening variables to HPWP system and held that introducing two-level intervening variables between HPWP system and enterprise performance is proper human resource management practice, directly influencing attitude and behavior of personnel (Chen Jinlin & Shi Jintao, 2007)

In general, the above research indicates that HPWP system can improve organizational commitments through influencing some factors such as workers' working attitude and behavior, finally influencing improvement of enterprise performance. Additionally it is worth mentioning that as far as the first author is concerned, HPWP system and relevant theories of organizational commitments are applied in other production enterprise to certain degree and there are quite some relevant researches. However, research on personnel identity which is very specific but prevalent phenomena in Chinese SOEs is very rare, thus exploring the relationship between personnel identity with organizational commitment, and the moderating role of HPWP system not only has practical value but also has very good potential contribution to social identity theory.

Chapter 3: Research Setting

3.1 Basic Condition of the Enterprises

The Grid Company in province B is a wholly-owned subsidiary of Enterprise A. The Company, as a state-owned mega corporation with grid operation as its core business, owing 58 subordinate bodies, 65 county-level power supply companies under direct supply and management, 98 county-level power supply holding or hosting companies and with employers of 95560 members, is in charge of major power system planning, construction, operation and power supply in province B. The Company is equipped with 27 substations (including convertor station) of 500 Kv with total power transmission capacity of 48.53 million kVA, of which the 83 electric transmission lines cover 8281 km, 133 substations of 220 Kv with total power transmission capacity of 34.49 million kVA, of which the 377 electric transmission lines cover 11404 km, 443 substations of 110 kV with total power transmission capacity of 30.24 million kVA, of which the 1094 electric transmission lines cover 13554 km.

3.2 Personnel Structure of the Enterprises

By the end of 2011, the Company has 82128 employees which can be classified into four types: workers in enterprises owned by the whole people, workers in enterprises of collective ownership, labor workers and rural electricians working in villages and towns. The first type of workers is regular employees in a power supply company, with the second type as its supplement, who are usually children of the former. The third and the fourth type usually undertake labor dispatching. Labor workers are mainly of college degree or from technical secondary schools while rural electricians who are usually work in the electric management station under the old system are of low education degree. The latter two types of personnel and other dispatching personnel usually undertake subsidiary or executional work with low technical demanding.

Firstly, Classification according to employment form: long-term personnel (regular employees) of 27969 working in major grid accounting for 34.06% of the total staff members; permanent employees of (regular employees) of 24776 working in holding or hosting

companies, accounting for 30.17%; contract employees of 4521, accounting for 5.50%; electricians of 21270 working in villages, accounting for 25.9%; other personnel of 3592, accounting for 4.37%.

Secondly, Classification according to type of enterprises: employees of 347 in headquarter, accounting for 0.42%; 72309 in power supply companies, accounting for 88.04%; 1178 in power generation stations, accounting for 1.43%; 495 in R&D institutions, accounting for 0.61%; 530 in training units, accounting for 0.65%; 7269 in other institutions, accounting for 8.85%.

Third, classification according to position: operators of 360, accounting for 0.44%; managers of 6080, accounting for 7.40%; professionals of 11195, accounting for 13.63%; technicians of 49159 in charge of production, accounting for 59.86%; other personnel of 15334, accounting for 18.67%.

Forth, classification of long-term personnel in major grid according to positions: operators of 360 accounting for 1.07%; managers of 4046 accounting for 14.47%; professionals of 6730 accounting for 24.06%; technicians of 13960 in charge of production accounting for 49.91%; other personnel of 2933 accounting for 10.49%.

Furthermore, among the whole personnel, employees of 898 have a degree of postgraduate or above, accounting for 1.09% of the total number of staff members; 7983 have a bachelors' degree, accounting for 9.72%; 19627 are of college education level, accounting for 23.9%; 14072 are from technical secondary schools, accounting for 17.13%; 14914 are of senior high school education level, accounting for 18.16%; 21744 are of junior high school education level, accounting for 26.48%; 2890 are with education level below middle school, accounting for 3.52%.

Lastly, among the personnel in major grid, employees of 844 have a degree of postgraduate or above, accounting for 3.01% of the total number of staff members in the major grid; 6502 have a bachelors' degree, accounting for 23.25%; 9270 are of college education level, accounting for 33.14%; 5460 are from technical secondary schools, accounting for 20.18%; 1785 are of senior high school education level, accounting for 6.38%; 3543 are of junior high school education level, accounting for 12.67%; 382 are with education level below middle school, accounting for 1.37%.

Employees of 1880 are entitled with a senior professional title accounting for 2.29% of the total number of staff; 5698 with a medium professional title, accounting for 6.94%; 12943

with a primary professional title, accounting for 15.76%. Additionally, there are senior technicians of 243, accounting for 0.30%; technicians of 2418, accounting for 2.94%, senior workers of 11014, accounting for 13.41%, medium workers of 6981, accounting for 8.5% and primary workers of 1687, accounting for 2.05%.

3.3 Current Status of Personnel Management

In 2007 and 2008, the subordinate companies – Power Company C and Power Company D of Grid Company in B Province make experiments of “comprehensive reform of human resources management”. However, the reform is still in pilot phase, so the comprehensive system of human resources management is not launched fully and the labor workers and rural electrician in all basic units still raise appeal of “equal pay for equal work and direct signing of labor contract”. At the same time, Labor Contract Law is formally implemented on January 1, 2008 and Regulation on Implementation of the Labor Contract Law is issued on September 18, 2008, all of which clearly specify that we must establish new labor relation of socialism with “standard and order, fair and reason, mutual benefit and win-win result and harmony and stability”.

In light of the Financial Accounting Standard, staff can be defined as the following three types of personnel which still affect the current HR plan and management.

(1) Personnel concluding a labor contract with the enterprises, including full-time, part-time and temporary workers.

(2) Personnel appointed officially by the enterprises but without concluding a labor contract, including members of Board of Directors and board of supervisors.

(3) Personnel neither concluding a labor contract with the enterprises nor being appointed officially, but providing services to the enterprises as the staff do.

The Labor Contract Law provides standards on paying for overtime work and on compensation for non-paid overtime pay, which forces enterprises to scientifically revise and improve the current standard on fixed number of labors, optimize employment allocation, reasonably define workload and guarantee the rest and vacation for employees, so that to avoid illegal acts.

To implement of the Labor Contract Law is, based on the current situation, to thoroughly implement of contract signing and registration system, changing, removing and terminating system, file management system, censorship system and statistic analysis system, to increase

and improve various systems in staff management, to conduct standardization construction in work procedure, to ensure staff management related links and procedures have rules to follow and confirm to current laws and regulations and to preserve evidences.

3.3.1 Differences in compensation

The Labor Contract Law defines that dispatched laborers are entitled to the same rights of equal pay for equal work as employees contracted with a certain enterprise. At present, there is a relatively wide salary gap between labor workers, rural electricians and workers in enterprises owned by the whole people. On one hand, labor workers and rural electricians now have salary equal to or slightly higher than the market level. On the other hand, the salary of workers in enterprises owned by the whole people is higher than theirs. There are two options to reach equal pay for equal work: to decrease the salary level of the workers in state owned enterprises in a large scale or to increase that of dispatched workers in large scale. However, the first option may trigger instability while the latter way may increase labor cost for enterprises, which may directly affect the value preservation and appreciation of national asset. The Labor Contract Law defines that an employer determines the salary distribution and salary level independently according to its operation situation and economic benefits. But, in fact, the labor dispatching company, as an employer, almost has no liberty in salary distribution. It is a problem remains to be studied and considered cautiously that whether the dispatching company should increase its salary level to as high as that of labor hiring enterprises.

Salary payment

According to the Labor Contract Law, on one hand, the labor dispatching company has to pay the laborer monthly for his labor and pay laborer (signing a fixed-term of over two years labor contract) in light of the minimum wage standard in work-free period; on the other hand, the labor hiring enterprise has to pay overtime payment and performance bonus to the laborer and provide work position related treatments. Labor hiring enterprises are also demanded to provide normal salary adjustment mechanism for continuous working. That means, the salary of dispatched laborers consists of two parts: payment from labor dispatching company and payment from labor hiring enterprises. The question is that who will pay for the insurance. According to current policies, insurance of one person can only be paid for by one unit. Then according to the principle of one who pays salary pays for insurance, salary statistics may be false.

Salary source

At present, salary of workers in enterprises owned by whole people is linked with workers performance according to relevant national regulations, which is paid by enterprises under the item of salary payable expenditure. Salary of labor workers is paid by enterprises under the term of service fee or other expenditure. Salary of rural electrician is from the rural power grid maintenance expenditure. The salary source is determined by the classification of workers. The primary cause of the income gap between different types of workers lies in the bearing capacity of the corresponding expenditure. To realize the idea of equal pay for equal work, the government needs to carry out relevant policies to unify the salary source of various types of workers.

What's more, the definition of salary in the newly issued Financial Accounting Standard may also cause more difficulties for salary management. In the Financial Accounting Standard, the "salary" is defined as below:

Salary is the reward or other relevant payment a enterprise given to its staff to exchange for service. Benefits provided to the spouse, children or other being supported person of the staff by the enterprise is also included in salary.

Salary scope:

- ① Wages, bonus, subsidies and allowance.
- ② Welfare expense
- ③ Social insurance premiums including medical insurance premiums, retirement insurance premium, unemployment insurance premium, industrial injury insurance premium and birth insurance premium.
- ④ Housing accumulation funds
- ⑤ Labor union expenditure and personnel education fund
- ⑥ Non-monetary welfare
- ⑦ Compensations for dismissed employees.
- ⑧ Other expenditures to exchange for services from staff

3.3.2 Current Status of Social Security

Social insurance of staff with different identities differentiates in three aspects: the under writing unit, standard of contribution ratio and categories of insurance.

a. Managing methods of social insurance

Social security system in our country is gradually improving with varied managing methods in insurance system. The identity of the staff is the base to set up the current social insurance systems and to carry out management according to the way to buy insurance. The Labor Contract Law provides specific regulations on establishing and improving social insurance systems for laborers, and even more strict demands on that for workers who were not once workers in state-owned enterprises such as e rural electricians, labor input personnel and.

b. Social insurance premium

Except for the obligation to establish and improve social insurance relationship for staff, the employers also have to pay for the social insurance premium timely in full amount. In collecting and approving social insurance premium base, the employer should be in strict line with the current law. Laborers are entitled to the right to terminate the labor contract with the employer and to get compensation in case that the employer does not pay the social insurance premium timely in full amount. Employers that do not pay the social insurance premium by rule shall bear civil liability as well as corresponding administrative liability. Hence, it forces the power enterprises to thoroughly implement the social insurance policy and to carry out a better management on social insurance work. Therefore, once the employer establishes a labor relationship with a worker in any, it should go to the social insurance department for a registration and pay the social insurance premium by rule in time.

c. Social insurance relation transfer

According to the Labor Contract Law, in case that the laborer terminates the labor relation with the employer due to certain reasons, the employer has to complete the insurance relation transfer within 15 days. It puts even higher demand on power enterprises in efficiency of insurance management. Because of grading management of social insurances in power enterprise, different social insurance methods and locations and the local labor security department as the licensing authority of each social insurance, we are required to improve the refinement of social insurance management, work efficiency and avoid the unnecessary dispute caused by the working limit of business such as transfer.

With the deepening of electric power system reform and the rapid development of power grid, the contradiction between increased employment demand and undersupply of personnel caused by the business development of power enterprises has become increasing apparent. As

power supply enterprises have the special background of state-owned enterprises, they cannot all unify the employing way in the short term. That is, they cannot change the existing problem in the enterprises that personnel have various identities. Therefore, theoretically, employees with various identities have different identities to the organization and different manifestations to organizational commitments. On one hand, the demand of talents is increasing rapidly because of the quick development of power grid, especially the employees in production line; on the other hand, the understaffing in production line is very serious because of the demand of workers amount control under the policy of downsizing for efficiency and the historical and structural understaffing situation.

3.4 Reform of Power Company C

Comprehensive reform of human resources management for Company C starts from organization, post and working condition setting, reform of salary system, taking a post by employment of group, personnel dynamic management etc. and prepare a series of reform proposals to ensure implementation of reform with orderliness.

The company has set 15 functional departments, namely: Director General Department (Party Committee Office), Production Technology Department, Safety Supervision Department, Power Sales Department, Rural Electrician Department, Power Control Center, Development Plan Department, Ministry of Basic Construction, Human Resource Department, Financial Department, Ministry of Audit, Committee of Party Office, Discipline Inspection Supervision Department, Trade Union Office and Security Department. Specialized organizations are provided, namely Management Center of Electricity Cost, Power Measurement Center, Customer Service Center, Overhaul Center of Power Transmission and Transformation and Material Supply Center. In which, Overhaul Center of Power Transmission and Transformation and Customer Service Center are set as per the standard of second-level organization.

Set subordinate power supply bureau, among them, power marketing function in urban area has been transferred to Customer Service Center in the whole due to the establishment of the center. Therefore, Director General Office, Production Technology Department, Financial Department, Safety Supervision Department, Rural Electrician Department and Power Control Center have been set; the original function of other power supply bureaus are not changed and set Director General Office, Production Technology Department, Financial

Department, Power Marketing Service Center, Safety Supervision Department, Rural Electrician Department and Power Control Center.

3.4.1 Post setting scheme

Post setting. On the basis of position sequence standards (8 levels in total) for power supply teams in provincial company, the position chain (12 levels in total) has been extended appropriately according to the current situation of Power Company C, they are as follows: team leader, deputy team leader, principal technician, senior technician, dedicated technician, senior dedicated technician, intermediate dedicated technician and junior dedicated technician, senior workers, intermediate workers, junior workers and auxiliary workers.

The rural electricity post is provided with 7 post levels as per relevant requirements of position sequence for rural power supply office in provincial company, they are as follows: Office Director, Deputy Director, managers (Safety Training Officer, Network Distribution Officer, Marketing Manager and Comprehensive Service Supervisor), dedicated technician, dedicated workers, general workers and auxiliary workers.

Post level setting. Middle management posts include Level 16-19, among them, general posts are Level 18-19 and deputy posts are Level 16-17; post from level 11-15 are professional technical posts, in which, senior posts are Level 14-15, intermediate posts are Level 11-13 and junior post is Level 11; main manufacturing post are Level 3-15, among them, Level 13-15 are team leaders, Level 12-14 are deputy team leaders, Level 11-12 are senior dedicated technician, Level 10-11 are dedicated technicians, Level 9-10 are senior dedicated technician, Level 8-9 are intermediate dedicated technician, Level 6-8 are junior dedicated technician, Level 6-7 are senior workers, Level 5-6 are intermediate workers, Level 4 is junior workers and auxiliary workers are Level 3 workers.

Rural electricity post is divided into 3-11 levels, among them, Office Director is for Level 11, deputy director is Level 9, managers is Level 7, dedicated technician is Level 6, dedicated worker is Level 5, general worker is Level 4 and auxiliary worker is Level 3.

3.4.2 Reform Scheme of Wages

Innovate current wages system, change job skills wage system to job performance-based payment system, make the payroll distribution trend to key and core posts, talents and employees with outstanding work performance and fully mobilize the employees' working enthusiasm, initiatives and creativity to promote the enterprise's reform and development

according to related spirits of wages system reform of companies in province B.

Unify wage system. The unified wage system is applied to all employees, labor workers of major industrial positions and rural electricians.

Implement the job performance-based payment system. Reform the current job skills wage system to implement job performance-based payment system for determining salary based on post, changing salary with post adjustment and for high performance and contributive posts. Job performance-based payment system consists of four parts of position-point salary, incentive payment of target performance, point supplementary wage and other wages.

Position-point salary: the enterprise sets 24 post levels as required, salary points of a salary scale for a position are 500 points, salary points of 6 salary scales for 24 post levels are 4,970 points and the maximum salary point is 9.94 times larger than minimum salary point. Set original post wage, skill-based pay, allowances and subsidies that cancelled to new position-point salary distribution system according to principle of proximity.

Incentive payment of target performance: cancel the monthly award, individual awards, comprehensive bonus and other award items and integrate them into incentive payment system of target performance and carry out assessment for implementation.

Point supplementary wage: point supplementary wage is a factor comprehensively considering personnel's accumulation of labor and a labor remuneration paid by the working years in the enterprise. Years of working of workers in enterprises owned by the whole people are executed as per regulations of provincial companies; years of working of labor workers of major industrial positions are calculated from the date of working on the position; and the years of working of rural electricians are calculated from the date of actual employment after establishing the power supply station. Apply segmented progressive computation to point supplementary wage system according to years of working; the starting point of progression standard is 5 yuan/year and increase 5 yuan every 10 years.

Other wages: cancel electricity subsidies, medical care, book-and-newspaper fee, food subsidies, price subsidies and other allowances and subsidies; reserve technical skills allowance, operation allowance, night shift allowance, talents allowance and other allowances regulated by national laws; and integrate the reserved allowances and subsidies to the other wages system.

3.4.3 Group Employment Program for Personnel Management

To ensure that there is no error in the whole safety production, first-rate service and team stabilization during innovation, group employment is applied to the personnel induction. Firstly personnel (including labor workers and rural electricians) voluntarily fill out the Induction Registration Form of Group Employment or induction Registration Form of Group Employment for Outsourcing Labor to fully express personnel's willingness; on this basis, they hired by organizations. After completing the employment by organizations, all employees shall re-sign the labor contract to know their positions and salaries. Among them, workers in enterprises owned by the whole people sign the labor contract with electric power bureau, outsourcing labor workers sign labor contract with labor dispatch companies and electric power bureau re-sign labor dispatch agreement with labor dispatch companies.

3.4.4 Implementation Plan on Personnel Dynamic Management

Prepare Personnel Management Measures for Power Company C involved in employee recruitment, personnel trainings, position management, labor discipline management, salary management, social insurance management, vacation management, performance management and labor contract management, rescission and termination of labor contract and retired administration, etc according to Labor Contract Law and Regulations for the Implementation of the Labor Contract Law; combine actual conditions of industrial production and operation to further refine, clear and enhance the assessment strength for implementing the dynamic personnel management.

Power Company C carries out the innovation after convoking a special workers congress and organizing mobilization meeting. Principle of group employment is “individual willingness, two-way selection and determination by organization”; firstly, the person is willing to apply it, a unit (department) assesses and recommends the person, then the organization investigates the person for approval. Adjust and appoint middle management according to cadre management permissions, organizational procedures, job demands and assessments; leading group for personnel group employment organizes group employment of professional technical posts and production (service) posts; the implementation of employment of professional technical posts is taken before production (service) posts.

The scope of this group employment: workers in enterprises owned by the whole people of electric power bureau, labor workers and rural electricians; automobilism and other common occupations are not included in it; and apply labor outsourcing to implement it.

Average post level of long-term personnel is 13.29; highest post level of outsourcing

labor is 14 and lowest post level is 3; highest post level of rural electricians is 11 and lowest post level is 3 after group employment. Average post level of outsourcing labor (including rural electricians) of all bureaus is 4.299 (average post level of labors of major industrial posts is 4.54 and that of rural electricians is 4.203). Some extra-special outsourcing labors will be appointed to position of team leader, position of delicate senior technicians or delicate technicians for power transformation and dispatching and be paid according to post prices.

3.5 Achievements from innovation

Comprehensive innovation of human resources manages and activates the human resources and completely promotes management effectiveness of human resources to provide strong guarantee to central work and basic work for enterprises through a series of system innovation.

(1) Standardize organizational structure and improve the management effectiveness. Combine requirements related to professional management and scientific definition of the functions to strictly and appropriately set organizational structure, straighten out management relations and improve management effectiveness in accordance with guidance described by municipal and Country-level power enterprises.

(2) Optimize the post structure and achieve the integration management. Set unified post system, achieve integration management, break role restrictions, eliminate differences between rural and urban power grid, overcome the weakness of flat management in post setting and create a good channel for personnel.

(3) Enhance dynamic management and revitalize the human resources. Refine termination terms of labor contract and create the outsourcing channel for personnel combining with actual conditions of power grid enterprises; prepare implementation rules of post management, standardize post-waiting management and establish post promotion and quit system to realize promotion and deviation of post and revitalize the human resources.

(4) Innovate salary system to make full use of incentives of salary. New salary distribution system makes the salary trend to key and core posts, talented employees and persons having outstanding performance. At the same time, highlight the incentive payment of target performance, enhance performance management effort, and make significant difference in salary income between same posts with different performance to make full use of incentives of salary.

3.6 Reform of Power Company D

Power Company D combines actual and major specifications demands on enterprises' production and operation to carry out comprehensive innovation of human resources from five aspects including organizational settings, preparation of post descriptions, and classification of post assessment, plan design of group employment and salary plan design.

3.6.1 Comparison before and after Comprehensive Innovation of Human Resources

(I) Comparison between organizational settings and post settings

Before innovation: the headquarter of power company D has 15 functional departments and 8 specialized centers, 5 power supply bureaus and 4 country-level holding power companies; 44 administrative offices, 67 teams; 1,156 posts including 84 middle management positions, 287 general management positions and 783 major production and other production positions (the setting proportion of the three posts is 1: 3.44: 9.32); And 147 posts in authority headquarters.

After innovation: the headquarter of power company D has 16 functional departments and 11 specialized centers, 5 power supply bureaus and 4 country-level holding power companies; 40 administrative offices, 60 teams; 1,090 posts including 97 middle management positions, 218 general management positions and 775 major production and other production positions (the setting proportion of the three posts is 1: 2.24: 7.99); And 134 posts in authority headquarters.

Changes: Set marketing inspection team which is dejectedly managed by centralized bureau in power administration to be responsible for marketing inspection of all marketing businesses of the administration; so that comprehensively establish supervision organizations for power production, marketing, finance and political work in power administration; compared with 17 functional departments of special-type enterprises, the setting number of authority functional departments is one less. Simplify the structures of power administration and change the "five disciplines, one department and one center" of the former structure to "three disciplines, one department and one center"; for post settings, set eight position sequence for major production posts and reasonably extend the post chain.

(II) Comparison in labor employment

Before innovation: there are 735 long-term on-post workers in major industrial posts and

143 on-post outsourcing labors and 1,228 rural electricians in major industrial posts.

After innovation: there are 836 long-term on-post workers in major industrial posts and 184 on-post outsourcing labors and 1,226 rural electricians in major industrial posts. There are 101 long-term workers and 41 outsourcing labors in diversified enterprises.

(III) Comparison in labor organization

Before innovation: power company D applies level-to-level administration combined with “localized management” to power production, marketing and rural operations. Entrust the maintenance, tests, overhaul and core businesses of grid production of 35kV and more than 35kV electric transmission and transformation equipment, communication, information and automation equipment to diversified enterprises for completion in the manner of economic contract.

After innovation: set four production centers and three marketing centers in power administration to achieve specialized management of operation, maintenance, overhaul of power transmission and transformation, power charges and customer services (include 800KVA and more than 800KVA); reclaim the maintenance, tests, overhaul and core businesses of grid production of 35kV and more than 35kV electric transmission and transformation equipment, communication, information and automation equipment entrusted to diversified enterprises for completion in the manner of economic contract and transfer them to employer for completion; and implement the integration of marketing and distribution in power administration.

(IV) Salary comparison

(1) Income comparison between long-term personnel of major industrial posts:

Execute job skills wage system in long-term personnel before innovation and apply job performance-based payment system in long-term personnel of major industrial posts after innovation. Excluding special factors, there is little changes in long-term personnel’s salary, significant increase in middle management’s and deputy staff’s, team leaders’ and dedicated technicians’ salaries after innovation. It shows the principle of “salary trends to key posts”.

(2) Income comparison between labor workers of major industrial posts:

Job performance-based payment system is applicable to all labor workers of major industrial posts and the salary is increased by 44.5% after innovation. The absolute value of the salaries differential of internal labor workers is little, because the salary standard executed by labor workers is much lower than the salary standard of major industrial posts and the

number of post levels is small (two levels including dedicated workers and unskilled workers) before innovation. After innovation, labor workers and long-term personnel of major industries are incorporated in the same salary system to (1) ensure that there is little large fluctuation in long-term workers' salaries and significant increase in junior & middle dedicated workers' salary standard compared with former labor workers' salary standard; (2) some labor workers are promoted to the higher level post because there is a uneven distribution in all disciplines and more than 1/3 labor workers are gathered in substation operation; although some labor workers' salaries are limited by the employment conditions, there is still significant increase in labor workers' salaries.

3.6.2 Problems and Difficulties after Comprehensive Reform of Human Resource

The first one is the unification of relevant standards of rural and urban electricity supply during urban-rural integration management. Because of the effect 5.12 Earthquake, comprehensive reform of human resource of Company D in 2008 does not include the rural electricity supply. According to the reform goal of urban-rural integration in Company D, the differences in production operation standard, marketing service standard, electricity rates policy, etc. between urban and rural electricity supply lead to the increase of workload and block the progress of urban-rural integration during the urban-rural integration management of power supply bureau, which need the unification and specification of the relevant urban and rural electricity supply standards by provincial company.

The second is the decrease of rapid reaction capacity in professional centre because much work needs the coordination and support from power supply bureau. We have operated according to the conventional business mode for a long time, thus many electricity customers have get used to the primary service mode. With the practice of professional management mode, however, the big changes in service mode and workflow force customers to adapt to the new mode which need increased publicity and a transitional period. At the beginning of the reform, much work needs the assist and coordination from power supply bureau, which increases the workload in power supply bureau and decreases the rapid reaction capacity in professional centre.

The third is the problems in source of labor cost. The labor workers salary and various premiums in Company D are paid by external service charge. With the increase of salary standard and personnel amount, the expense has been increased a lot after reform. If the expense is still paid by service charge, it will bring high pressure to the bureau and there will

be audit risk because of the large external service charge.

According to the standard of cost budget from financial department in B Province, cost budget in provincial company does not take the expense in pilot reform into account. Compared to the outsourcing before reform, the labor cost in project cost decreases a lot. The above reasons lead to the shortfall in labor cost of labor workers

Chapter 4: Theoretical Model and Hypotheses

4.1 Theoretical Model

Chapter 2 systematically sorts out relevant research literature, reflecting theoretical situation and knowledge basis of the research and further defines scientific problems which are discussed predominately by the research. The chapter elicits theoretical model and research hypoesthesia of the paper on the basis of literature analysis and induction to define interactive relationship between all research factors.

Research framework of the paper mainly contains three parts, respectively “personnel identity”, “HPWP system” and “organizational commitments”. Firstly, relationship between personnel with different identities and organizational commitments is discussed by relationship between personnel with different identities under moderating of HPWP system (procedural justice, system of comprehensive salary and information sharing) and organizational commitments. Research framework of the research is shown in Figure 4-1.

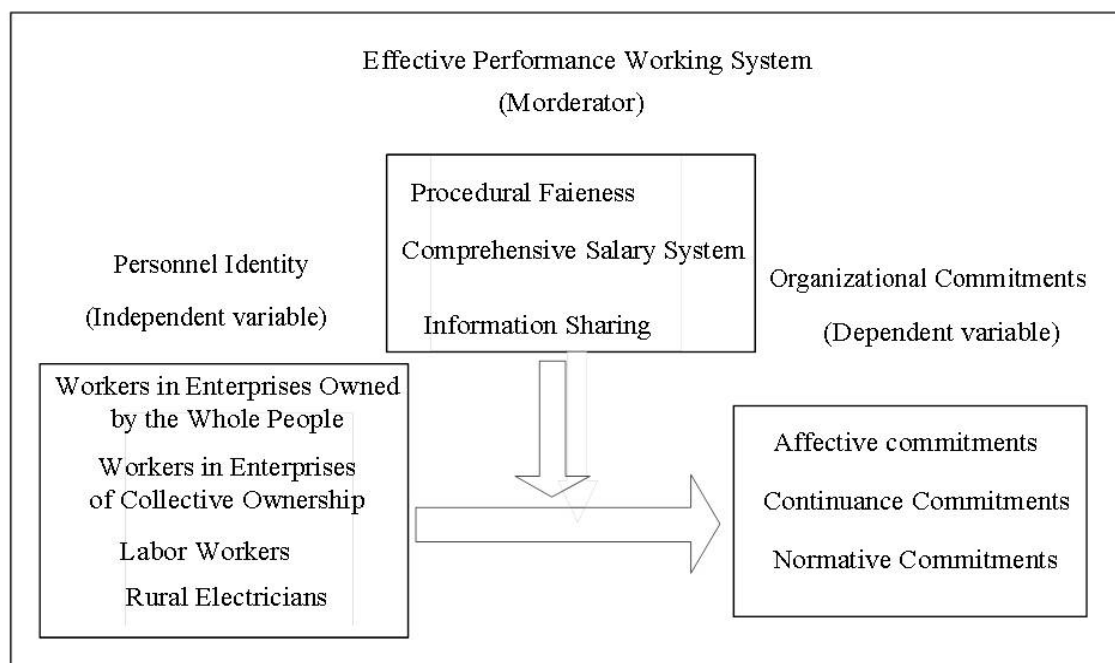


Figure 4- 1 Framework for Research

4.2 Hypothesis

4.2.1 Hypothesis on the Relationships between Personnel with Different Identities and Organizational Commitments

Social Identity Theory provides new thoughts to explain group behavior. “Social Identity” originally means identity. In Chinese, the word “identity” means the social status and qualification of a person. Social Identity Theory thinks that social identity is an important component of self-concept. An individual affects his own social perception, social attitude and social behavior through the cognition to members who belong to the same group with him (Hogg & Tindale, 2005). Individual identity and social identity are the bases of distinguishing interpersonal relation and intergroup relation (Tajfel & Turner, 1986). In interpersonal communication, behaviors are controlled by personality variable; in intergroup communication, behaviors are controlled by group sorting process from individual. Individual identity means individual’s self-recognition with some peculiarity. Thus individual identity lets individual confirm in space-time that he and himself are the same person rather than anyone else. Social identity is individual recognition that he stays in a social group and a social category. Thus social identity lets individual recognize and intensify that he is same to or similar with other people in a social category, but different with other people. In social communication, people always try to get or maintain active social identity (to promote their self-esteem). To a great extent, the active identity comes from the advantageous comparison between in-group and related out-group. When people are unsatisfied with current social identity, they can choose to leave the group or find ways to achieve active identity. The creator of Social Identity Theory (Tajfel, 1978) defined social identity as individual cognition of the qualification possessed by the members who belong to the same group with him, and the qualification’s importance in value and affection.

As power supply enterprises have the special background of state-owned enterprises, they cannot all unify the employing way in the short term. That is, they cannot change the existing problem in the enterprises that personnel have various identities. Therefore, theoretically, personnel with various identities have different identities to the organization and different manifestations to organizational commitments.

Social Exchange Theory put forward by Homan (1961) and Blau et al. is initially used to explain the motivation behind the exchange of interpersonal attitude and behavior (Blau, 1964; Singelmann, 1972). Reciprocal concepts have been introduced in Social Exchange Theory and

they have expanded the theory to explain the relationship between personnel and organization (Eisenberger, Cummings, Armeli, & Lynch, 1997; Glick & Hutchison, 2005; Hinkin, 1995; Hutchison & Garstka, 1996). They have pointed out that personnel will understand the behavior and attitude of individual on behalf of organization (such as the manager), the decisions made by management and the implementation process as the general purpose and attitude towards them from the organization. Personnel have the tendency to personalize organization. Personnel understand organization's behaviors (such as human resource practice and management reliability) as personalized display of organizational commitments to them, while they develop the degree to organizational commitments according to their own cognition. So the organizational commitments of personnel come from their cognition of organizational support and commitments. That is to say, they believe that organization will value their contributions and care for their welfares. Personnel will regard manager's behaviors and decisions, organizational decisions and so on as organizational commitments and support to them and because of this, they will give active responses and return active attitudes.

With the view of Social Exchange Theory, personnel and organization are in a "mutually beneficial" relationship. Personnel get what they need from the incentive conditions provided by organization, such as salary, post, favorable work environment, etc, or get a sense of achievement and respect from work; and personnel also need to conform to organization's requirements, such as professional technology, working time, commitment and loyalty to organization, etc. What is different from traditional employment relationship is that dispatching company provides training, salary and welfare for personnel, but personnel work in the client company. So based on Social Exchange Theory, the dispatched personnel will weigh the salary and welfare they get from dispatching company, and form organizational commitment to dispatching company; they will also weigh how they will be treated in their work and form organizational commitment to the client company (Liden, Wayne, Kraimer, & Sparrowe, 2003).

Scholars have described the establishing and developing process of the relationship between employees and organization and indicated the establishing process of employee organizational commitment: firstly, as the key organizational representative, the administrator builds relationships with his subordinates. With the improvement of the quality and exchange of the relationship, employees return the administrator's suggestion with relatively positive attitude and good performance. Secondly, employees go through a comprehensive exchange

relationship with organization. With the development of employment relationship, employees progress in their cognition of organizational support. Personnel regard administrative behavior, decision, organizational policy and program as the proof of organization's promise and support to them, and return with positive attitude and good performance. Employees' recognition of organizational support affects organizational commitment, attendance rate, dimission rate, performance and civic behavior of organization, etc. Different kind of human resource administrative activities determines different relationships between organization and personnel, conveys different expectations for personnel and shows different organizational commitment to personnel, thus affecting personnel's productivity and organization's performance. Each kind of human resource administrative activity also affects personnel's attitudes, especially personnel's expectations and vulnerability. These attitudes include different dimensions of personnel's organizational commitment (SettoonBennett & Liden, 1996a, b).

On the basis of the above analysis, we put forward some hypothesis:

Hypothesis H1a: Different identities of the employees result in different levels of organizational commitments in various dimensions.

As regular staff of power supply enterprise, workers in enterprises owned by the whole people work in the enterprise in the long term, and have a strong sense of belonging to the enterprise with less idea of leaving the enterprise and seeking another way out. Meanwhile, as regular staff of power supply enterprise, they have received relatively comprehensive enterprise culture and professional ethics education, so they think it's their obligation to work hard for the enterprise with a relatively strong sense of honor.

As a complement for ownership by the whole people, the identity of workers in enterprises of collective ownership is less formal than that of workers in enterprises owned by the whole people, their sense of belonging to the enterprise is not stronger than that of workers in enterprises owned by the whole people and they have the idea of seeking another way out occasionally. Meanwhile, many workers in enterprises of collective ownership are daughters of workers, so they won't comply with the rules and regulations of the enterprise sometimes with the help of parents or relatives.

Labor workers and rural electricians is a kind of labor dispatching way in many power supply enterprises. Labor workers are mainly made up of graduates of secondary technical school while rural electricians mainly work in power management stations of old system. Their culture is generally low. Labor workers and rural electricians and other dispatched

people mainly take on some auxiliary and executive work with low technical content. There is a gap in the position, job security and salary between them and regular staff, which affects their organizational civic behavior. They may reduce their organizational civic behavior or even cancel it to express their weak commitment to organization.

At the same time, because rural electricians work in the lowest level of power supply enterprises, their sense of job security and salary are lower, and their sense of belonging to the enterprise is lower, even some rural electricians quit their job and seek another way out.

Hypothesis H1b: Among the levels of various dimensions of organizational commitments that of the employees in enterprises under the ownership by the whole people is the highest one, compared to which that of those in collective enterprises is slightly lower, while for labor workers it is even lower and it reaches its minimum level for rural electricians.

Organizational commitment in this research adopts the definition of Meyer & Allen (1991) and is subdivided into affective commitment, continuance commitment and normative commitment, so we will further analyze it from the three factors (affective commitment, continuance commitment, normative commitment) of Meyer and Allen.

Firstly, affective commitments:

Chinese traditional culture focuses on the overall spirit, emphasizes patriotism to serve the society, the nation and the country, reserves beneficence principles, as well as initiates self-disciplines and social commitments, interpersonal concordance, loyalty and return. The effect on Chinese personnel by its affective commitments is presented as: “show deep emotions to the organization, identify unit goal, and be willing to devote everything for the unit, support the leadership, as well as help others and actively participate in various activities of the organization. Hardworking is to perform more obligations over the unit rather than a complete pleasure.” Chinese culture focuses on affective experience elements in experiences, attaches importance to self-interest of receptions, emphasizes “a little help is worthy of great return”. Thus, the care and great kindness personnel experience in work becomes an important factor to affect the emergence of affective commitments.

Workers in enterprises owned by the whole people and workers in enterprises of collective ownership are full time personnel of the enterprise. They enter into labor contracts with power enterprises. There is a long-term and stable relationship. They show a strong sense of belonging toward the power enterprises. Labor workers and rural electricians belong to dispatch workers. Although dispatch workers do not directly enter into labor contracts with

the employment units and are not the formal personnel of employment units, they raise affective dependence or identity attitude toward the employment units, just the same as formal personnel of the units do. There is much affective commitment.

Hypothesis H2a: Employees with different identities have different emotional commitments.

Hypothesis H2b: Employees with different identities have different emotional commitments.

Secondly, continuing commitments:

Most workers in enterprises owned by the whole people and workers in enterprises of collective ownership work at a power enterprise for long time, and occupy a post for long time. They are skilled workers for the post, however, the personnel in ubiquity has drawbacks that the ability of reemployment is rather poor. In addition to this, due to lack of personnel's knowledge and skills, personnel is short of reemployment opportunities. Especially these elder personnel, they are influenced by traditional culture, occupational education, etc., and their compact is still bound to these in original and old system. They refuse to burden risks of reemployment. They are usually bored with risks and not willing to give up rather stable life and jobs. Thus, workers in enterprises owned by the whole people and workers in enterprises of collective ownership have rather high continuance commitments. Labor workers and rural electricians are dispatch personnel rather than formal personnel of power enterprises. In addition, the relationship between them and the dispatch firm is to enter into agreements. Stability to personnel of ownership by the whole people and workers in enterprises of collective ownership is rather low.

Hypothesis H3a: Employees with different identities have different normative commitments.

Hypothesis H3b: Normative commitment for employees in enterprises under the ownership by the whole people is the highest, compared to which that for those in collective enterprises is slightly lower, while for labor workers it is even lower and it reaches its minimum level for rural electricians.

Thirdly, normative commitments:

Chinese culture emphasizes individuals' obligations in family ethic and society relations, focuses on cultivation practice and stresses dynamic role of moral subjects. As the main stream of Chinese culture, Confucian culture especially takes moral cultivation and

cultivation as the base, and supports justice outweighing benefit as to relationship between justice and benefit. Affected by this, normative commitments of Chinese personnel are presented to be: take social norms and work ethic as codes of conduct, industriously and consciously work, with due diligence, show rather strong senses of obligation and responsibility toward the organization, and rather low dismissal rate.

Power enterprises are state-owned enterprises with all sound regulation and systems, as well as standard management. Compared to current private enterprises, its working environment and conditions are rather favorable. Working pressure is not high. Labor workers and rural electricians have no labor contracts. Power enterprises more rely on social norms and moral ethic to restrain behavior of dispatch worker so that employment risk can be avoided. Job nature of labor workers and rural electricians is not stable; at the same time; they work at the bottom of the enterprises. According to the survey, currently, most labor workers and rural electricians show rather low satisfaction to the dispatched work. In addition to essentially satisfaction to workmate atmosphere of power enterprises, they are not rather satisfied with salary, welfare, occupational development, firm management, etc.

Hypothesis H4a: continuance commitments vary with personnel identity.

Hypothesis H4b: continuance commitments of workers in enterprises owned by the whole people are the highest. Compared to workers in enterprises owned by the whole people, continuance commitments of workers in enterprises of collective ownership is lower, while these of labor workers are much lower, and these of rural electricians are the lowest.

4.2.2 Hypothesis Based on the Relationships between Personnel in HPWP system and Organizational Commitments

Whether can relationship between personnel with different identities and organizational commitments be improved by human resource management practice of enterprises? It is the issue to be discussed in this section.

As a strategic human resource management, HPWP system is a series of personnel-oriented human resource management practice (Pfeffer, 1996, 1998). It stresses information share and personnel's participation in making a decision, thus forming harmonious labor management relationship to establish "participatory" culture in enterprises (Kumar, 2000) for enhancing knowledge, skills and capabilities of personnel (Becker & Huselid, 1998). Related researches show that HPWP system is becoming the only way for enterprises to win competitive advantage. At the same time, more and more researches show

human resource practice has an appreciable influence on organizational performance, such as dismissal rate, productivity, financial performance of enterprises, etc. (Guthrie, 2001; Huselid, 1995).

Primary goal for adoption of HPWP system by the organization is that it is anticipated to express the care for personnel from the organization with investment over personnel. Thus, personnel will recognize them to be an important part of the organization, and raise a sense of belonging and the commitments toward the organization so as to conduct behavior and attitude to return the organization. In addition, as previously mentioned, empirical studies have founded out the influence on organizational commitments by human resource management measures internally in HPWP system, such as training (Saks, 1997; Tannenbaum, Mathieu, Salas, & Cannon-Bowers, 1991), assessment and promotion (Robertson, Iles, Gratton, & Sharpley, 1991; SchwarzwaldKoslowsky & Shalit, 1992), etc. (Meyer & Smith, 2000).

HPWP system provides personnel with direct and real damage or benefit. It is more possible to be related to organizational support and commitments identity. There is a stronger action force on organizational commitments. For example, performance assessment and salary policy have a lasting and powerful influence on personnel. Performance assessment system with rather poor design or practice can not accurately assess performance quality and quantity of personnel. The salary system, especially these parts elating to performance assessment, will not be capable to reward these really making contributions to the organization. Due to that personnel recognize the poor design in performance and salary brings frigidity, they expect a favorable designed and reasonable performance assessment system, as well as a competitive salary system meeting internal justice and external justice. This will shown support and commitment to them from the organization (Mayer & Davis, 1999).

According to “norms of reciprocity” and “exchange theory”, Eisenberger et al. propose that the key of personnel commitments relies on the care and support experienced by personnel from the organization (Eisenberger, Huntington, Hutchison, & Sowa, 1986). Mathieu et al. conduct element analysis on researches developed in relation to organizational commitments. They classify related factors of organizational commitments into eight types. In addition to stimulation, work satisfaction and working performance, the rest five types are individual variables, working pressure, variables of work characteristics, relationship between team and leadership and variables of organizational characteristics. If the eight types of variables resulting in organizational commitments are further segmented, there will be more

antecedent variables of organizational commitments (Mathieu et al., 1990).

Organizational commitments are more influence by decision-making procedure of leadership than that of the salary increased (Folger & Konovsky, 1989). Ostroff & Bowen (1997) hold that, with forming understanding to organizational images of the personnel, human resource practice affects their expectation over the nature and depth of the relationship between themselves and the organization, thus affecting attitude toward work and work behavior of the personnel.

Furthermore, procedural justice (McFarlin & Sweeney, 1992; Tyler & Lind, 1992) and organizational value (Finegan, 2000) are also believed to be important factors affecting organizational commitments. Specific human resource management practice influences affective commitments (Gaertner & Nollen, 1989; Ogilvie, 1986). Human resource management strategy and investment to the personnel result in affective commitments of personnel with rather high knowledge (Tsui, Pearce, Porter, & Tripoli, 1997).

Adams put forwards the theory of justice. At the same time, many theories have described importance of organizational justice. Domestic researches on a sense of justice of the organization particularly emphasizes structural aspects (Adams, 1995). Fan Jingli et al. classify organizational justice into distributive justice and procedural justice. Procedural justice includes formal procedure and interactional justice (FarhEarley & Lin, 1997).

Many studies have shown that a sense of justice is an important factor influencing attitude and behavior of personnel within the organization. The realization of a sense of justice is much easier to initiate organizational citizen behavior of the personnel. Similarly, it is also the topic for the scholars to pay attention to that how to improve commitment level of the personnel for stimulating personnel to make more contributions to the organization.

Under the background in China, Zhang Yichi et al. integrates HPWP system components by using exploratory factor analysis method and validates that, under the background in China, HPWP system resulted from foreign similar researches is a series of measures stressing personnel participation. Conclusions from their researches are as follows: first, HPWP system is constituted by a fewer human resource aspects or dimensions rather than many independent human resource management measures; second, HPWP system includes basic management, personnel participation, procedural justice and human resource management key points in human resource. The four factors imply HPWP system achieves high efficiency by stressing personnel participation. Human resource management capable to be good for stimulating the

personnel and enhance capabilities of the personnel is the base for enterprises to establish and maintain competitive advantage (Zhang Yichi, 2008).

Based on the results from researches of all above-mentioned overall analyzed, we conclude that: enterprises are capable to enhance the senses of identity and belonging of personnel toward the organization by appropriate management practice and management in organizational commitments of the personnel to enable them more actively participate in the work. This has a very active influence on enterprises' enhancement of operating efficiency. Especially when new Labor Law comes into force, the long-term labor relationship between personnel and the enterprises is encouraged. In the long run, there are more profound meanings for enterprises to enhance organizational commitments of personnel and develop affection relationship of the personnel toward the organization.

Due to that organizational commitments in this research adopt definitions from Meyer and Allen (1991) and they are classified into affective commitments, continuance commitments and normative commitments, the relationship between HPWP system and structural faces of each organizational commitment is deduced below.

Influencing factors of affective commitments are trust toward the leadership, living support from the organization, team sustaining behavior of the leadership and organizational dependability; influencing factors of normative commitments include social justice exchange level of personnel, dependability on workmates by the personnel and collective working spirit of the team personnel serve (Ling Wenquan et al., 2001). Later, cultural background is introduced to the research on organizational commitments. The research shows that, under Chinese cultural background, the personnel consider the relationship between individuals and the organization mainly from employment retaining aspect. They care about stability of current job and development prospect of enterprises. The orientation of organizational commitments directs more to individuals instead of abstract organizational integrity. Organizational support is believed to be the most important factor among most factors influencing organizational commitments (Liu Xiaoping et al., 2004).

Firstly, as to affective commitments, when the organization conducts HPWP system, support for the personnel is shown, and then is willingness to invest and train the personnel. For example, training, internal promotion and employment security guarantees enable the personnel to feel care from the organization, thus increase their affective attachment, identity and involvement load on the organization. In addition, measures such as personnel participation, team, information share, etc. symbolize that when organization believes the

personnel, it is willing to grant the personnel with right of autonomy and enhance involvement degree of personnel's participation in organizational affairs (such as decision making). Thus, the personnel will get a feeling to be respected, be proud to be in the organization, be more content to make contributions, continue their affective relationship between them and the organization, as well as increase loyalty and affective attachment toward the organization (AppelbaumBailey & Berg; Lincoln & Kalleberg, 2003).

Secondly, as to continuance commitments, for example, incentive-type salary measures in HPWP system are generally distributed by the organization according to personnel performance. If the personnel leave the organization, they lose this reward. Thus, the cost to leave the organization is formed so that the personnel are kept in the organization and raise rather high continuance commitment toward the organization (Meyer & Allen, 1997; Meyer et al., 2000). Similarly, internal promotion and employment security are measures for the organization to care about the personnel. These also enable personnel to be with rather high continuance commitments. However, it is noted that when the organization trains the personnel, there is different impact on continuance commitments. It can be divided into two aspects. First, if it is related to specific skills of the firm, maybe related skills acquired by the personnel by formal training or informal training among workmates, due to that these are specific skills of the firm and cannot be transferred to other organizations; theoretically, the personnel feel the cultivation over them by the organization. Once they leave the organization, it will be the dismissal cost. Thus, rather high continuance commitment is formed. On the other hand, if it is formal education of general training, after they acquire general skills, the opportunity for them to work at other organizations is accordingly increased when they leave this organization (Appelbaum, 2000). Currently, in most power enterprises, training mainly takes demand analysis as the point cut. According to principles of "learn what is done" and "make up what lacks of", fully results such as utilize personnel capability quality model, employment conditions, performance management, etc. to determine training contents. With pre-employment training and post training, develop the training for all personnel and comprehensively improve employment capability of the personnel.

The last one is normative commitments. As previously mentioned, when the organization conducts HPWP system for developing the personnel, such as internal promotion, training, teams, etc., the personnel will feel the investment and care for them from the organization. Thus, unbalance between the personnel and the organization emerges, resulting in that the personnel feel they own the organization due to their receiving benefit from the organization,

To return the attention and investment, the personnel recognizes they shall be loyal and committed to the organization, as well as the obligation to stay in the organization (Meyer et al., 2000; Meyer & Allen, 1991; Meyer et al., 1997).

Related surveys discover that procedural justice related to labor workers and rural electricians of power enterprises have larger influence on their organizational commitments.

Firstly, there is injustice in policy and systems for labor worker/ rural electricians and formal personnel. It results in dissatisfaction feelings of labor workers and rural electricians even dismissal tendency. When conflicts over justice happen between labor workers/ rural electricians and formal personnel, attitude of the firm generally has a larger effect on their organizational commitments. As to justice, if a basic and reasonable justice is regulated and maintained in policies of the firm, although current laws have no regulatory rules or provide sound protection for rights and interest of dispatch workers, relatively speaking, justice system and measures of the firm absolutely is a human resource policy benefiting a lot. Second, there is much effect from injustice in management measures for labor workers/ rural electricians and formal personnel. Formal personnel in some power enterprises treat labor workers and rural electricians as subordinates and exclude them, which does harm to improvement of team cooperation and organizational performance of enterprises; furthermore, justice of performance assessment is also one of the important factors influencing organizational commitments of dispatch workers. Meanwhile, work for labor workers and rural electricians most belong to simple and grass-roots work. Treatment for their salary, welfare and insurance is lower than that for formal personnel. Additionally, due to restrictions by agreement term, most of them lack job security. Thus, they have no the sense of satisfaction for work challenge or the sense of achievement of the organization or salary and welfare compared to that of formal personnel. If there is no the sense of satisfaction, their commitment to the organization and work performance is influenced, further influencing function of enterprises.

Thus, according to above overall analyses, following hypotheses are obtained:

Hypothesis H5: Hypothesis H5: HPWP system is positively correlated with various dimensions of organizational commitments.

H5a: HPWP system is a positive correlation to affective commitments.

H5b: HPWP system is a positive correlation to normative commitments.

H5c: HPWP system is a positive correlation to continuance commitments.

Hypothesis H6: Employees display rather consistently higher levels on various dimensions of organizational commitments where HPWP system is implemented (compared to units not implementing HPWP system).

H6a: Implementing HPWP system, affective commitments of personnel with various personnel identities is rather high.

H6b: Implementing HPWP system, normative commitments of personnel with various personnel identities is rather high.

H6c: Implementing HPWP system, continuance commitments of personnel with various personnel identities is rather high.

Hypothesis H7: Evaluations of employees on HPWP system play a role of positive adjustment between the identity of employees and the various dimensions of organizational commitments.

Hypothesis H7a: Evaluation over each dimension of HPWP system by personnel has a positive moderating effect on personnel identity and organizational commitments.

Hypothesis H7b: Evaluation over each dimension of HPWP system by personnel has a positive moderating effect on personnel identity and normative commitments.

Hypothesis H7c: Evaluation over each dimension of HPWP system by personnel has a positive moderating effect on personnel identity and continuance commitments.

4.2.3 Control Variables

Demographic variables mainly refer to some basic characteristics of individual staff, while these characteristics are often related to the researched variables.

Steers (1997) put forward antecedent and consequence mode of organizational commitment, the mode includes antecedent (predictive variable) and consequence (criterion variable) of organizational commitment. Predictive variable contains individual trait, operating characteristic and work experiences; criterion variable includes will of stay at the post, attendance and work performance. In which, individual trait includes age, achievement motivation and educational background; operating characteristic includes challenge and integrity of work; work experience includes attitude of a team, confidence level to organization and personal importance (Mowday, 1999)

Personal factors consist of age, seniority, marital status, level education and work experience and so on. Advanced staff may generate affective commitments to enterprise

(Meyer et al., 1997, 1984). However, Nowday thinks organizational commitments are negatively related to individual level of education. According to correlational research in China, gender difference, education background and residence difference as well as difference of local staff and nonlocal staff have significant influence on affective commitments (Cui Xun, 2003). Though differences of research results are existed, the influence of characteristic variable to organizational commitments cannot be doubted. In addition, there are different influences on organizational commitments for various working background. For example, the organizational culture under foreign-owned enterprise is closely related to continuance commitments, while organizational culture under state-owned enterprise is closely related to affective commitment. Culture of foreign-owned enterprise has significant influence on continuance commitments and culture of state-owned enterprise has significant influence on affective commitment.

Demographic variables involved in the paper include gender, age, education background, seniority, department and post, the following six aspects shall be considered for analysis.

(1) Influence of gender to organizational commitments

Some research data indicate that gender difference may cause diversity of organizational commitments level. The level of organizational commitments for female is higher than male, this is due to there is a task for women, namely raising a child, which may form career break, so many organizations have barriers to female when receiving new members. Therefore, the cost for women to enter an organization is higher than man, and the cost for changing job is higher as well. Thus, higher feeling of dependency will produced once they have entered an organization, and higher level of organizational commitments will be also built up gradually.

Regardless of regular staff or outsourcing labor in power supply enterprise, female personnel expect to work more stable, and have stronger dependence to the organization and observe rules and regulations of the organization. At the same time, they are more perceptual than male. Therefore, gender has a significant influence on organizational commitments and organizational commitments of female personnel to organization are higher than male personnel.

(2) Influence of age to organizational commitments

Young personnel look forward to the future of themselves and organization when they just enter enterprise, and they obtain professional skills to lay a foundation for future development with various trainings, so they have higher organizational commitment.

According to research of predecessors, the level of organizational commitments will be basically increased with age. Generally speaking, the higher the age, the more one will pay into the work, and the degree of social responsibility and ethics standard will be higher. While the independency of young people on organization is not strong and they have many opportunities, so the elder personnel will prefer to stay at the current organization than the young. Such personnel present higher level of organizational commitment. Whether regular staff or outsourcing labor, they will have higher affective commitments and continuance commitments when they are elder. However, the commitments level of elder regular staff and are slightly higher than younger regular staff in normative commitment, while the commitments level of elder outsourcing labor is slightly lower than younger outsourcing labor.

(3) Influence of educational background to organizational commitments

Personnel with higher educational background will have higher personal expectations and they have more opportunities for selecting job and organization than lower educational level. Meanwhile, the personnel with higher education level will have stronger social responsibility and morally binding than lower educational level. Therefore, they have lower level of affective commitments and continuance commitments and higher level of normative commitment. There are more personnel with higher educational level in regular staff, but their level of normative commitments is basically similar, while the main personnel of outsourcing labor are provided with more personnel with lower educational level. With attendance of more graduates highly educated, the level of normative commitments for outsourcing labor with different educational level has formed remarkable difference. Therefore, the influence of education background to organizational commitments is remarkable: higher educational background, lower level of organizational commitment.

(4) Influence of seniority to organizational commitments

The negative correlation of staff turnover, age and seniority is consistent according to the researches. There are higher staff turnover for shorter seniorities, it is because that the independency of young personnel to enterprise is not strong and they are provided with strong adaptability and have more opportunities for a new job. Besides, the cost of changing job for young personnel is lower than elder ones. The social connection will become stronger and stronger when the seniority for personnel in an enterprise is longer and its corresponding loss of social communication for leaving enterprise will be larger.

Young personnel whose seniority is less than one year look forward to the future of

themselves and organization when they just enter an enterprise, and they obtain professional skills to lay a foundation for future development with various trainings, so they feel grateful for the organization and have a certain organizational commitment. At the same time, the senior personnel are skillful personnel in business, and they will pursue more demands and have higher organizational commitments for their devotion to the organization when they are affirmed and praised, namely their higher demands (self-respect, development, etc.) are met. The seniors, especially in state-owned enterprise often have stronger sense of approval to the enterprise and they believe that they are an important member for the enterprise; even though they are not satisfied for the enterprise, or difficulties existed in the enterprise, they will also have strong sense of belonging to the enterprise. Therefore, we expect the seniority has significant influence on organizational commitments and the seniority is longer, the organizational commitments will be higher.

(5) Influence of department and post to organizational commitments

There are larger differences of working contents among various departments and posts, and the personnel will have certain differences on recognition degree of organizational commitment. The theory and practice has proved that promotion system has stronger motivation for development of personnel. Therefore, management fully experiences the approval of organization and obtains promotion, so they have higher level of organizational commitment. The general workers are in basement of enterprise and have a lower commitments level.

Based on the above, we call personal characteristic including gender, age, educational background, seniority and post level as control variables. The above hypothesis are summarized in Table 3-1 and the next chapter will present research methods, including research method and measurement methods of variables, development of measuring tools, data collection methods and analytical method.

Table 4- 1 Summary of Research Hypothesis

H1a: Different identities of the employees result in different levels of organizational commitments in various dimensions.

H1b: Among the levels of various dimensions of organizational commitments that of the employees in enterprises under the ownership by the whole people is the highest one, compared to which that of those in collective enterprises is slightly lower, while for labor workers it is even lower and it reaches its minimum level for rural electricians

H2a: The level of affective commitments is different for different personnel identity.

H2b: The affective commitments of workers with ownership by the whole people is the highest, and the affective commitments of workers with collective ownership in enterprise is lower than workers with ownership by the whole people; the affective commitments of outsourcing labor is lower than workers with collective ownership and the affective commitments of rural electrician is the lowest.

H3a: The level of normative commitments is different for different personnel identity.

H3b: The normative commitments of workers with ownership by the whole people is the highest, and the normative commitments of workers with collective ownership in enterprise is lower than workers with ownership by the whole people; the normative commitments of outsourcing labor is lower than workers with collective ownership and the normative commitments of rural electrician is the lowest.

H4a: The level of continuance commitments is different for different personnel identity.

H4b: The continuance commitments of workers with ownership by the whole people is the highest, and the continuance commitments of workers with collective ownership in enterprise is lower than workers with ownership by the whole people; the continuance commitments of outsourcing labor is lower than workers with collective ownership and the continuance commitments of rural electrician is the lowest.

H5: HPWP system is positively correlated with various dimensions of organizational commitments.

H5a: Various dimensions of HPWP system are positively related to affective commitment.

H5b: Various dimensions of HPWP system are positively related to normative commitment.

H5c: Various dimensions of HPWP system are positively related to continuance commitment.

H6: Employees display rather consistently higher levels on various dimensions of organizational commitments where HPWP system is implemented.

H6a: The level of affective commitments for various personnel identity is relatively higher in enterprises implementing HPWP system.

H6b: The level of normative commitments for various personnel identity is relatively higher in enterprises implementing HPWP system.

H6c: The level of continuance commitments for various personnel identity is relatively higher in enterprises implementing HPWP system.

H7: Evaluations of employees on HPWP system play a role of positive adjustment between the identity of employees and the various dimensions of organizational commitments.

H7a: The evaluation of personnel to various dimensions of HPWP system plays positive moderating effects on relationships between personnel identity and affective commitment.

H7b: The evaluation of personnel to various dimensions of HPWP system plays positive moderating effects on relationships between personnel identity and normative commitment.

H7c: The evaluation of personnel to various dimensions of HPWP system plays positive moderating effects on relationships between personnel identity and continuance commitment.

Chapter 5: Research designs and methods

This chapter mainly discusses questionnaire development process, pilot investigation and data analysis method.

5.1 Variable definition

The models referred in this paper mainly discuss such researches of relationship of three types of variables as employee ID, organizational commitments and High Performance Working Practice system (HPWP system), where employee ID is the independent variable, organizational commitments is the depended variable, and High Performance Working Practice system is the regulated variable. In addition, we also add into such a control variable as personal attributes of employees, which are the demographic variable, in order that we can get known the differences of different personality characteristics of employees between organizational commitments and each aspects of working performance.

5.1.1 Employee ID

This paper mainly discusses four types of employee ID: workers owned by the whole people, collectively-owned workers, labor workers and Rural electrician. From the previous section we can concluded that these four kinds of employee identity is obviously different. The fluidity of workers owned by the whole people is the lowest. In fact, compared with economic income to these employees of four kinds of identities, it also shows a high-low trend.

Table 5- 1 Classifications of Personnel Identity

Identity	Stability	Mobility	Social status	Economic status	Personnel identity
Workers owned by the whole people	The highest		The highest	The highest	4
Collectively-owned workers	Higher		Higher	Higher	3
Labor workers	Medium		Medium	Medium	2
Rural electrician	The lowest		The lowest	The lowest	1

Furthermore, the social position of these four kinds of employees is also obviously different. Therefore, in follow-up researches, we can illustrate the relative values of this kind

of stability variance through different assignment of the variable of personnel identity, as is stated in Table 5-1.

5.1.2 Organizational commitment

The organizational commitment definition of this research adopts such three construction surfaces as emotionality pledge proposed by Meyer and Allen (1991), long-enduring pledge and normative pledge. Emotionality pledge represents organizational emotional attachment, identification and involvement of organization members; long-enduring pledge is based on personnel loss during the period between perceptions of organization members and leaving the organization; regulated commitment, is to illustrate that organization members think it is of responsibility and obligation to stay in the organization.

Organizational Commitment Scale is revised mainly referred to the questionnaire of Chinese employee's organizational commitment organized by Ling Wenxuan et al. combined with the questionnaire of organizational commitment, which consists of three aspects, those of emotional commitment, long-enduring commitment, regulated commitment. It has a total of sixteen items, which is respectively used for measuring three aspects of organizational commitments. These items are designed based on relevant literature combined with actual condition of the object of study, and finalized through discussion of research group. Adopting five point form of Eysenck, each item of the questionnaire is positive scoring, and the scores from one to five respectively respect inconformity, less inconformity, uncertainty, less conformity, conformity or definitely disagree, quite disagree, more disagree, agree, quite agree.

5.1.3 High Performance Working Practice system

As is previously referred, based on different research purpose and background, many scholars have different opinions of High Performance Working Practice system. However, the main purpose of organizing implementing High Performance Working Practice system is to develop a set of management system in order to cultivate technique and ability of employees, motivate employee through such methods as information-sharing and participation to further improve organizational performance. Based on this concept, referred to such relative documentation as Arthur(1992, 1994), Delaney and Huselid (1996),Guthrie (2001),Guthrie, Snell, Nyamori (2002), Huselid (1995), Osterman (1994), Pfeffer (1996), this research concludes main contents of High Performance Working Practice system, which concludes

such core measures as internal promotion, incentive wage, training, employee involvement, team and information sharing. Therefore, in this research, we will conclude these measures as the measure surface with such three dimensions as procedural justice, total compensation system, information sharing.

Referred to the High Performance Working Practice system measurement in the existing effective performance working research (Bae, Chen, Wan, Lawler, & Walumbwa, 2003b; Delery & Doty, 1996; Liu Shanshi et al., 2004b; WangHong, 2011), we can obtain three dimensions of High Performance Working Practice system: procedural justice, total compensation system and information sharing. The items are drawn up according to documentation and the actual research object, and the relative items of predictive questionnaire can be obtained by discussion in the research group. The scale adopts Eysenck five-point scoring with positive scoring. The scores from one to five respectively corresponds inconformity, less conformity, uncertainty, less conformity, conformity or definitely disagree, quite disagree, more disagree, agree, quite agree. Whether the relative union will execute High Performance Working Practice system, will be determined in the random sampling.

5.1.4 Control variable

It mainly concludes some essential information of employees:

Working ages of employees: should be calculated from when the employee goes to work for the first time.

Educational Level: is divided into five categories, namely primary school, middle school (technical secondary school), vocational school, regular college, graduate university (master and doctor), which are marked with 1 to 5.

Gender: measured by dummy variables with 1 indicating male and 0 indicating female.

Age: the actual age of the employee

Operating Post: is divided into three categories, namely the managing position, technical position, and manufacturing position.

Distinctions among companies: include information for reference such as the location and scale of the company, etc.

The preliminary questionnaire will at first have a preliminary investigation, and have the revised formal questionnaire used for formal investigation.

5.2 Research design and questionnaire survey

In this paper, we adopt natural experimental study methods, select and implement Power Company of High Performance Working Practice system as the experimental group, and randomly select power company without High Performance Working Practice system as the control group. We measure the organizational commitment and High Performance Working Practice system through developing the questionnaire of organizational commitment and High Performance Working Practice system, and compare differences in organizational commitment between experimental group and control group, in order to verify the influence that the High Performance Working Practice system implementation has caused to the organizational commitments of employees. Through such methods, we can prevent involvement of relative personnel of the research project from affecting data accuracy, ensure to discover the real situation of enterprise practice, in order to avoid the influence of artificial factors.

5.2.1 Preliminary investigation

Before the research personnel organize relative personnel to fill out the questionnaire, they stressed that the investigation purpose is only for scientific research and the final analysis results are only referred in the relative reports without revealing any personal information and involving any matter concerning with job and income. The above contents are also printed on the beginning of the questionnaire. At the same time we should stress that each person that involves in the investigation will be awarded a present.

We select five power supply companies in the grid company in B province of A group, where one power company has implemented High Performance Working Practice system, while the other four power supply companies hasn't implemented High Performance Working Practice system, and the power supply companies without implementing High Performance Working Practice system are randomly selected from the name list of subsidiary company of B province grid corporation. 56 copies of questionnaire are for each power supply company, and each company will be stratified sampling according to such program as illustrated in Table 5-2. The questionnaire shall be field guided to fill out by the research members. We have taken back 235 copies of questionnaires with the recovery rate of 83.93%. Picking out and throwing away the questionnaires with missing values and of the same answers, we finally obtained 217copies of effective questionnaires, which account for 92.34% of all the

recycled questionnaires, and for 77.50% of all the questionnaires. From Table 6-3 we can analyze that in this sampling, male personnel account for 60%, with average age of 37.68, average education level slightly higher than associate's degree, the differences of number of people among four kinds of identities are quite small, and quite a number of people from the production post while quite a few number of people from the technical post with the fewest number of people from management post.

Table 5- 2 Pilot survey of the sampling schemes of each unit

post Identity	management	Technical expertise	Production	Total
Workers in enterprises owned by the whole people	1	3	10	14
Workers in enterprises of collective ownership	1	3	10	14
Labor workers	1	3	10	14
Rural electrician	1	3	10	14
Total	4	12	40	56

Table 5- 3 distributions of samples for pilot study

	N	Mean value	Standard deviation
Gender		.60	.491
Age		37.68	7.991
Seniority		14.78	8.503
Education level		3.12	.912
Management post		.03	.164
Technical post		.17	.373
Production post		.76	.425
Workers in enterprises owned by the whole people		.24	.425
Workers in enterprises of collective ownership		.24	.431
Labor workers		.26	.439
Rural electrician		.26	.441
Valid value of N (list state)	217		

For collected questionnaire, we shall firstly have two researchers manual inspect whether the questionnaire has been seriously filled out and exists missing values. During the process,

we shall pick and throw away invalid questionnaire, then we shall input data in the form that one inputs data while the other monitors in order to ensure data accuracy. The subsequent analysis mainly focuses on the High Performance Working Practice system and Organizational Commitments, for the purpose that we can obtain questionnaires of high quality for formal investigation. The analysis tool we use is SPSS18.0.

Firstly, we shall convert the scores of negative scoring title, then we shall calculate total score of all the titles, we can pick and throw away titles of poor quality through calculating relativity between each title and total score. We shall now have the exploratory factors analyzed, judge whether the data are suitable for factor analysis according to KMO and Bartlett sphericity test method. During the exploratory factors analysis process, we shall adopt principle component analysis, and take methods of variance maximizing rotation, obtain the common divisor according to the standard of characteristic value of more than one. After discussion by research group, we shall delete titles that the loads are all less than 0.5 to all the common divisors. We shall not have factor analyzed once again until obvious factor structure occurs and all the titles are obviously attributed to the corresponding common factors.

5.2.2 Formal investigation and sampling analysis

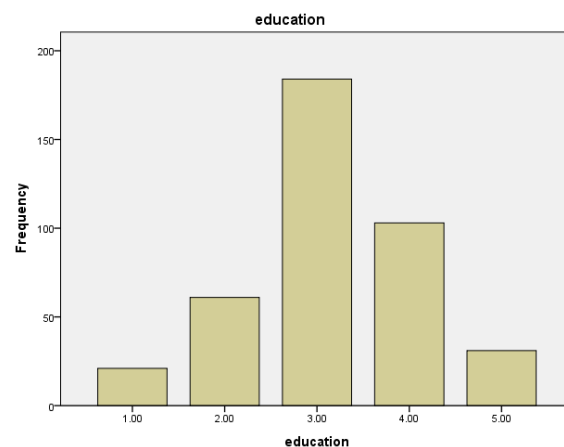
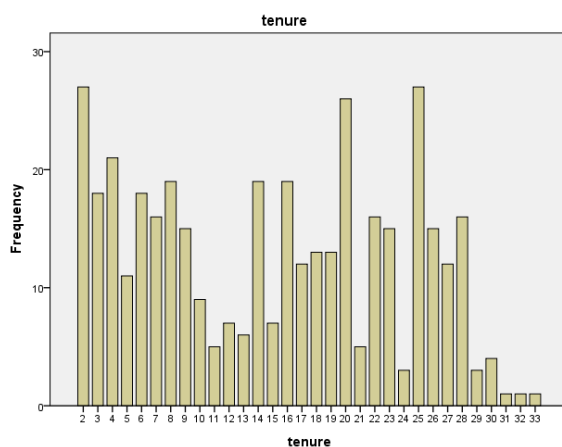
The scale revised in the pilot study shall be used for formal investigation, and the specific contents are illustrated in the annex. In the name list of grid companies in B province, we randomly select two unions of implementing High Performance Working Practice systems, and eight unions without implementing High Performance Working Practice system. According to the investigation plan as shown in Table 5-2, it shall be completed within ten days by research groups. The questionnaires are totally 560 copies, after picking and throwing away invalid questionnaire, we finally obtain 400 copies of valid questionnaire and the valid rate is 71.43%. Such investigation plans shall be good for obtaining the influence that both the employee identity and post have caused to the organizational commitments. It is good for us completing the investigation in a short time to exclude the impact of emergencies.

Before the researchers organized relative personnel to fill out the questionnaire, they stressed that the purpose of investigation is only for scientific research, and the relative report only involved the final analysis results without revealing any personnel information, and it shall not involve any matters that refers to income and post. The above contents are also printed at the beginning of the questionnaire. What we shall also stress that each person that participants in the investigation will be awarded a present after the end of investigation.

For the collected questionnaires, we shall firstly have two researchers manual inspect whether they had been seriously filled out and existed missing values in the questionnaires. During the process, we picked and threw away invalid questionnaires, and then input data adopting the form that one input and the other one monitored. The amount of questionnaire shall controlled within 30copies, and the data input process shall be every one hour data input after half an hour rest I order to ensure input data accuracy. The finally sampling distribution is as shown in Table 5-4.

Table 5- 4 distributions of samples for formal study

	N	Minimum value	Maximum value	Mean value	Standard deviation
Seniority		2	33	14.89	8.623
Education level		1	5	3.15	.953
Gender		0	1	.61	.487
Age		24	54	37.82	8.123
Management post		0	1	.04	.190
Technical post		0	1	.21	.406
Production post		0	1	.75	.435
Workers in companies owned by the whole people		0	1	.25	.434
Workers in enterprises of collective ownership		0	1	.25	.434
Labor workers		0	1	.25	.434
Rural electrician		0	1	.25	.434
Valid value of N (State of list)	400				



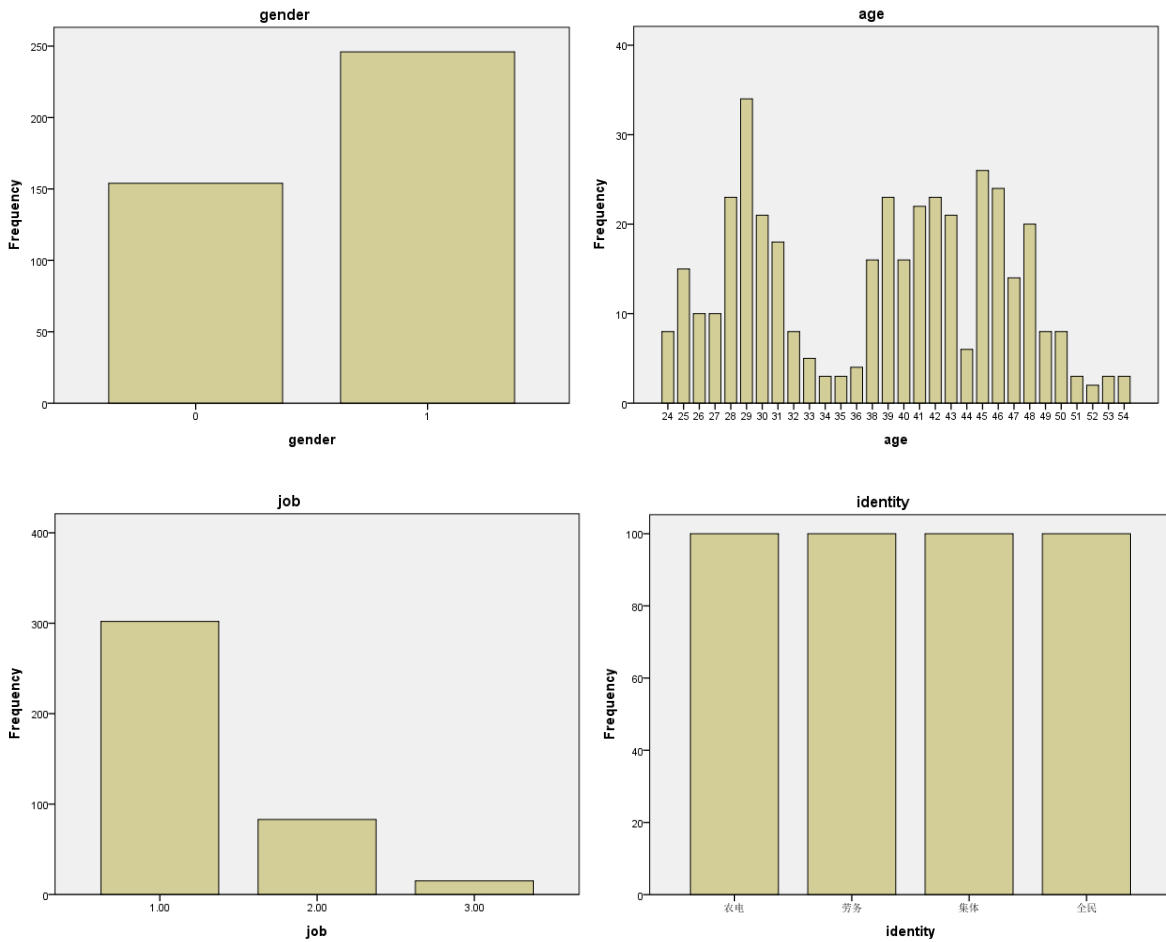


Figure 5- 1 The histogram (frequency map) of various demographic variables

From the table 5-4, we can analyze that among the education levels of all the samples, associate’s degree is slightly high, male workers account for 61%. In the post distribution, production post account for 75%, technical post account for 21%, while management post account for 4%. In the identity characteristic, employees of four kinds of identities are equally distributed in the samples, each for 25%. The histogram (frequency map) of the aforementioned working ages, educational levels, genders, ages, positions, and employee identities is shown as Figure 5-1.

Taking four kinds of identities as the classified variables and dividing the samples into four small samples for analyses in different groups could lead to the following table (Table 5-5), which describes the detailed distinctions among the four small samples.

Table 5- 5 The grouping and distribution of formal investigating samples

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		

Personnel Identity, Organizational Commitment and High Performance Working Practices System in Chinese Power Companies

tenure	Rural electrician	100	16.71	6.266	.627	15.47	17.95	2	28
	Labor workers	100	6.28	2.462	.246	5.79	6.77	2	11
	Workers in enterprises of collective ownership	100	24.43	3.349	.335	23.77	25.09	18	33
	Workers in enterprises owned by the whole people	100	12.13	8.080	.808	10.53	13.73	2	28
education	Rural electrician	100	2.2200	.75985	.07599	2.0692	2.3708	1.00	4.00
	Labor workers	100	3.1500	.41133	.04113	3.0684	3.2316	2.00	4.00
	Workers in enterprises of collective ownership	100	2.9400	.64854	.06485	2.8113	3.0687	1.00	4.00
	Workers in enterprises owned by the whole people	100	4.3100	.46482	.04648	4.2178	4.4022	4.00	5.00
gender	Rural electrician	100	.70	.461	.046	.61	.79	0	1
	Labor workers	100	.55	.500	.050	.45	.65	0	1
	Workers in enterprises of collective ownership	100	.60	.492	.049	.50	.70	0	1
	Workers in enterprises owned by the whole people	100	.61	.490	.049	.51	.71	0	1
age	Rural electrician	100	41.17	6.649	.665	39.85	42.49	25	54
	Labor workers	100	28.29	2.418	.242	27.81	28.77	24	33
	Workers in enterprises of collective ownership	100	44.72	3.137	.314	44.10	45.34	38	53
	Workers in enterprises owned by the whole people	100	37.11	7.372	.737	35.65	38.57	26	52
job	Rural electrician	100	1.0000	.00000	.00000	1.0000	1.0000	1.00	1.00
	Labor workers	100	1.0000	.00000	.00000	1.0000	1.0000	1.00	1.00
	Workers in enterprises of collective ownership	100	1.4100	.49431	.04943	1.3119	1.5081	1.00	2.00
	Workers in enterprises owned by the whole people	100	1.7200	.71181	.07118	1.5788	1.8612	1.00	3.00

5.3 Data analysis methods

In this paper, we are supposed to obtain the data we need through large-scale questionnaires based on the theories review and hypothesis. We use SPSS18.0 and LIREL8.7 as tools for statistic analysis to verify that the series of hypothesis referred in the above

section can be supported by data, accordingly ensuring the external validity of conclusions.

Firstly, we have data of formal investigation exploratory factor analyzed, confirmatory factor analyzed, and reliability analyzed. Then we shall have relative variable descriptive analyzed to get known the distribution condition of relative variable in the samples. We can verify the relationship of employee identity and organizational commitments and the three dimensions. Then we have a relative analysis and pilot study the relationship of all the variables. We have dependent variable standard normalization treated to eliminate the influence of heteroscedasticity. We have a pilot survey before the regression analysis to judge whether it exists serious multicollinearity problems to the independent variable. If so, we shall have continuous variable standard normal treated and then adopt multiple regression analysis and multiple regression analysis with interactive effect to verify the control response of High Performance Working Practice system about employee identity characteristic and organizational commitment. The specific results will be reported in the next chapter.

Chapter 6: Research Results and Discussion

6.1 Factor Analysis on HPWP system and Organizational Commitments

The purpose of factor analysis is to judge if the data complies with the expected model structure and provide firm basis for further analysis. In the following process of factor analysis, we divide the data into half randomly, one is for the explorative factor analysis, and the other one is for the confirmatory factor analysis. This kind of analysis has been done for five times and there are few Distinctions between each time. The following result is just the result analyzed at the fifth time.

6.1.1 Efficient Performance Working System (HPWP system)

Before doing explorative factor analysis for the HPWP system rating scale, we check $KMO=0.831$, and Bartlett Sphericity Test $X^2=3215.01$, $df=91$, $P<0.001$, and it is indicated that the data is very appropriate for explorative factor analysis.

The result of the explorative factor analysis shows that the fourteen items are respectively belonged to three common factors, and its distribution shows the expected factor structure. Thereinto, factor one includes items from 1 to 6, and it's names as the procedural justice and Cronbach Alpha is 0.841; factor two includes items from 7 to 11, and it's names as the comprehensive salary system, and Cronbach Alpha is 0.84; factor three includes items from 12 to 14, and it's names as information sharing and Cronbach Alpha is 0.753. The Cronbach Alpha of the whole HPWP system Rating Scale is 0.896, and the above result shows the data complies with the expected structure and the reliability is good. The result is shown in Table 6-1.

The result of the confirmatory factor analysis is shown in Table 6-2, the fourteen items are respectively belonged to three expected factors, and the model fitting status is acceptable. Thereinto, the standardization coefficient of 9 is slightly less than 0.5 and it will be remained after being discussed by the research team. This is the optimal result obtained from the comparison of various measurement models.

Table 6- 1 Scale Rotation Component Matrix of HPWP system

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	Common factor		
	1	2	3
Deepgoing specialized skill training for the personnel	.849	.177	-.234
Extensive general skill training for the personnel	.788	.395	-.024
Deepgoing/extensive recruiting method used for recruitment	.736	-.135	.196
Do regular personnel attitude survey for identifying and adjusting personnel's moral	.667	-.026	.463
Performance feedback of personnel from multiple channels	.587	.298	.284
Do cross training for multiple working positions, skills or regularly take part in various works	.525	.374	.379
Provide job performance feedback of personnel for the personnel	.410	.722	.228
The personnel is promoted based on their performance rather than qualification	.055	.715	.232
Some partial of reward depends on the overall performance of the group	-.107	.704	.188
Set the channel for the personnel to complaint	.314	.679	.192
Regularly provide the evaluation of personnel performance for the personnel	.440	.648	.429
Provide related information about the enterprise finance status for the personnel	-.036	.353	.769
Provide related information about the enterprise strategic decision	.071	.337	.710
Provide related information about the operation status of the enterprise	.438	.226	.628
Variance contribution of each factor	25.873	22.38	17.02
Cronbach Alpha of each factor	0.841	0.840	0.753
Accumulative variance contribution (%)	65.281		
Cronbach Alpha of overall scale	0.896		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table 6- 2 Result of Confirmatory Factor Analysis of HPWP system Scale

	Standardization coefficient		
	1	2	3
1 Deepgoing specialized skill training for the personnel	0.74		
2 Extensive general skill training for the personnel	0.86		
3 Deepgoing/extensive recruiting method used for recruitment	0.59		

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4 Do regular personnel attitude survey for identifying and adjusting personnel's moral	0.62		
5 Performance feedback of personnel from multiple channels	0.65		
6 Do cross training for multiple working positions, skills or regularly take part in various works	0.65		
7 Provide job performance feedback of personnel for the personnel		0.86	
8 The personnel is promoted based on their performance rather than qualification		0.58	
9 Some partial of reward depends on the overall performance of the group		0.47	
10 Set the channel for the personnel to complaint		0.70	
11 Regularly provide the evaluation of personnel performance for the personnel		0.91	
12 Provide related information about the enterprise finance status for the personnel			0.69
14 Provide related information about the enterprise strategic decision			0.71
13 Provide related information about the operation status of the enterprise			0.74
χ^2/df		4.938	
NFI		0.90	
CFI		0.91	
RFI		0.90	
RMSEA		0.047	

6.1.2 Organizational Commitments

Before doing explorative factor analysis for the HPWP system rating scale, we check KMO=0.831, and Bartlett Sphericity Test $X^2=3215.01$, $df=91$, $P<0.001$, and it is indicated that the data is very appropriate for explorative factor analysis.

Table 6- 3 Rotation Component Matrix of Organizational Commitments Scale

	Component		
	1	2	3
I have opportunities to deal with matters in my own ways	.854	-.046	.270
I have responsibility to work for the current company	.797	.296	.037
My suggestions are paid attention in the working process	.783	.256	.082
I have strong sense of belonging for the current company	.738	.437	.116
I am glad to be assigned to work in this company	.707	.420	.005
I am willing to redouble my efforts to help this enterprise to be	.698	.509	.001

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success			
I am proud to tell other people that I work in this enterprise	.663	.470	.059
It's better for me to work in this enterprise rather than work in other enterprises.	.602	.522	.023
I stay here to work hard because I have emotion for the company	.527	.388	.312
I shall be loyal to the current unit	.268	.792	-.198
I satisfy with the method of implement policy	.336	.789	.212
My value is similar with the value of the enterprise	.354	.734	.108
Job-hopping is a kind of immoral behavior	.142	.731	.236
I satisfy with the method of decision-making	.412	.715	.102
We shall understand kinds of great decisions on the personnel	.161	.596	-.022
Even if I have other available chances, and have to leave the company, I will feel sad	.083	.098	.779
To continue to stay this enterprise, I am willing to accept any work	.104	.017	.737
Variance contribution of each factor	30.189	27.196	8.873
Cronbach Alpha of each factor	0.931	0.861	0.527
Accumulative variance contribution	66.258		
Cronbach Alpha of the overall scale	0.927		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Table 6- 4 Result of Confirmatory Factor Analysis of Organizational Commitments Scale

	standardization coefficient		
	affective commitment	normative commitment	continuous commitment
1 I have opportunities to deal with matters in my own ways	0.68		
2 I have responsibility to work for the current company	0.81		
3 My suggestions are paid attention in the working process	0.76		
4 I have strong sense of belonging for the current company	0.85		
5 I am glad to be assigned to work in this company	0.80		
6 I am willing to redouble my efforts to help this enterprise to be success	0.84		
7 I am proud to tell other people that I work in this enterprise	0.80		

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8 It's better for me to work in this enterprise rather than work in other enterprises.	0.77		
9 I stay here to work hard because I have emotion for the company	0.66		
10 I shall be loyal to the current unit		0.89	
11 I satisfy with the method of implement policy		0.74	
12 My value is similar with the value of the enterprise		0.81	
13 Job-hopping is a kind of immoral behavior		0.88	
14 I satisfy with the method of decision-making		0.68	
15 We shall understand kinds of great decisions on the personnel		0.49	
16 Even if I have other available chances, and have to leave the company, I will feel sad			0.58
17 To continue to stay this enterprise, I am willing to accept any work			0.47
χ^2/df		3.782	
NFI		0.93	
CFI		0.94	
RFI		0.92	
RMSEA		0.049	

Extract four common factors from the result of the explorative factor analysis, and the accumulative variance contribution is up to 72.23%; but the third common factor only has one item, the extraction method of factor is modified to limit to extract three common factors. The seventeen items are respectively belongs to three common factors, and its distribution indicates the expected factor structure, where factor one includes items from 1 to 9, and it's named as affective commitment, and Cronbach Alpha is 0.841; factor two includes items from 10 to 15, and it's named as normative commitment and Cronbach Alpha is 0.84; factor three includes items from 16 and 17, and it's named as continuous commitment and Cronbach Alpha is 0.753. The Cronbach Alpha of the whole HPWP system Rating Scale is 0.896, and the above result shows the data complies with the expected structure and the reliability is good. The result is shown in Table 6-3.

The result of the confirmatory factor analysis is shown in Table 6-4, it shows significant three factor results, and after trying various model modification, we found the following model have the optimal imitative effect. Although the standardization coefficients of 15 and 17 are less than 0.5, after being discussed by research team, they agreed to remain it. This is the optimal result obtained from the comparison of various measurement models.

6.2 Descriptive Results of Analysis

The HPWP system and Organizational Commitments and the descriptive analysis result of each dimensionality are shown in Table 6-5, we can see:

Table 6- 5 Descriptive Analysis of HPWP system, Organizational Commitments, and Their Various Dimensions

	N	Mean value	Standard deviation
HPWP system	400	2.99	.623
Procedural Justice	400	3.3500	.75473
Comprehensive Salary	400	2.8970	.81058
Information Sharing	400	2.7250	.65354
Organizational Commitments	400	3.0483	.63246
Affective Commitment	400	3.0642	.80057
Normative Commitment	400	3.0121	.93230
Continuous Commitment	400	3.0688	.70508
Effective N (list)	400		

(1) HPWP system

The mean value of HPWP system is 2.99, and it's very close to the counter level (fifth scale); in the three dimensionalities, the average score of the procedural justice is highest and up to 3.35, this is to say, the management system implemented by related enterprises has paid more attention to the procedural justice; the average score of the two dimensionalities of comprehensive salary and information sharing are relatively lower, from it we can see the personnel widely think the comprehensive salary and information sharing are in a low level.

(2) Organizational Commitments

The average scores between the organizational commitments and its three dimensionalities are very close to 3; for five rating scale, the low average score shows that the willing of emotion, responsibility and continuous injections to the enterprise are not strong. Normative commitment is lower than continuous commitment, that's to say the purpose that the personnel stay in the enterprise is the benefit consideration rather than moral consideration.

Make correlation analysis of all variables and can get the following results shown in Table 6-6:

There is a significant correlation between the HPWP system and its three dimensions

($P < 0.01$). All correlation coefficients are more than 0.5, and the Distinctions between the correlation coefficients are small; the Maximum is 0.834, and the minimum is 0.750; meanwhile, there is a significant relation between these three dimensions and it shows the three catch the intension of a certain aspect of HPWP system, and jointly indicate the HPWP system construct.

There is a significant positive correlation between the Organizational Commitments and its three dimensions. All correlation coefficients are more than 0.5 ($P < 0.01$), and the Distinctions between the correlation coefficients are small; the Maximum is 0.874 and the minimum is 0.564, jointly indicate the Organizational Commitments construct.

There is a significant positive correlation between HPWP system and its three dimensions and the Organizational Commitments ($P < 0.01$); it is a significant positive correlation with Affective Commitment and Normative Commitment ($P < 0.01$) (except procedural justice), and it is a significant positive correlation with Continuous Commitment ($P < 0.05$). Hypotheses H5 is supported, H5a and H5b in the following hypothesis will be supported and there is a partial support for H5c.

There is a significant positive correlation between Age and Affective Commitment ($P < 0.05$), the older the personnel, the higher the level of the Affective Commitment; there is a significant positive correlation between Age and Continuous Commitment ($P < 0.01$), the older personnel is trend to stay the current unit; there is a significant negative correlation between Age and Normative Commitment ($P < 0.01$), the initiative and positivity of responsibilities and obligations of maintain the enterprise are relatively lower. Take the median of the age as the limitation to divide the samples into younger age group and older age group, The result of variance analysis has shown that there are significant distinctions among the groups of emotional commitment ($P < 0.05$), normative commitment ($P < 0.001$), and continuous commitment ($P < 0.001$), and these results is in accordance with the above correlation analysis.

The aforementioned relationships between ages and organizational commitment as well as various dimensions are shown as in Figure 6-1. The slope of the straight line in the diagram has vividly illustrates the aforementioned results of analyses.

There is a significant negative correlation between the age and the evaluation of HPWP system and the older personnel has a lower evaluation; there is a significant negative correlation between the age and the procedural justice ($P < 0.01$), and the older personnel has a lower evaluation for the procedural justice; there is a significant positive correlation between the age and the information sharing ($P < 0.01$) and the older personnel has a higher evaluation

for the information sharing.

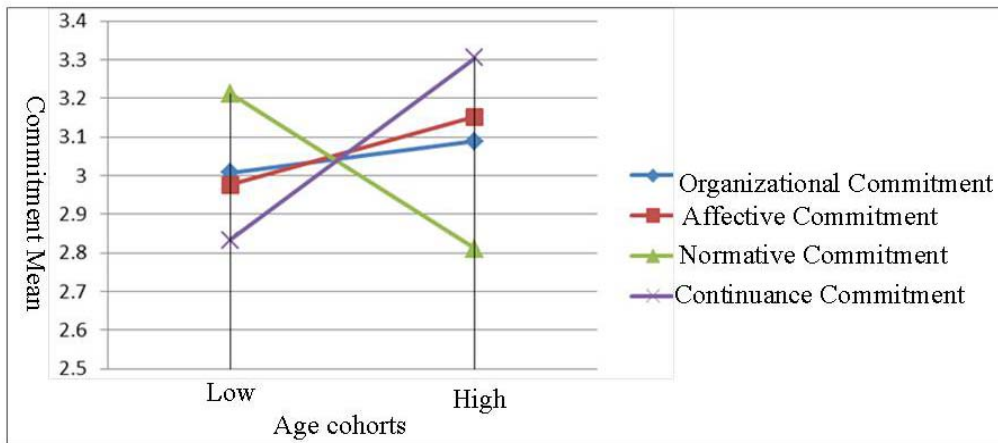


Figure 6- 1 Distinctions of Organizational Commitments and Their Various Dimensions among Groups at Different Ages

Divide the groups by age. For the result of ANOVA of HPWP system and their dimensions shows the Distinctions of HPWP system between the two groups is significant ($P < 0.05$); the Distinctions of the procedural justice between the two groups is significant ($P < 0.001$); the Distinctions of the comprehensive salary between the two groups is non-significant ($P > 0.10$); the Distinctions of the information sharing between the two groups is significant ($P < 0.10$).

The distinctions of HPWP system and their various dimensions among younger and older age groups can be shown in Figure 6-2

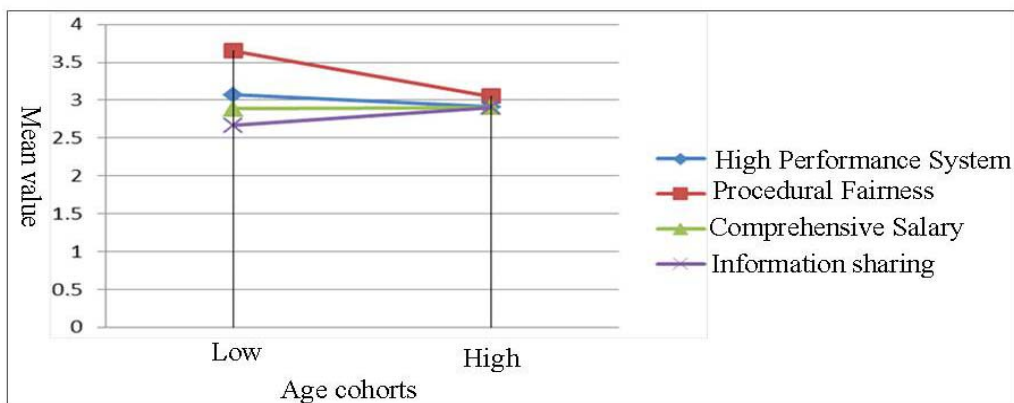


Figure 6- 2 Distinctions of HPWP system and Their Various Dimensions among Groups at Different Ages

There is a significant negative correlation between the seniority and normative commitment ($P < 0.01$), and there is a significant positive correlation between with continuous commitment ($P < 0.01$); it has a significant negative correlation with HPWP system, procedural justice and comprehensive salary ($P < 0.01$). Take the median of the seniority as the limitation to divide the samples into younger age group and older age group as the factors to do ANOVA

for organizational commitment and their dimensions respectively, and the result is same as the above-mentioned result. We can see there is non-significant distinction between the organizational commitment and affective commitment in the two groups ($P>0.10$), but there is a significant distinction between the normative commitment and the continuance commitment ($P<0.001$). The following diagram (Figure6-3) has vividly illustrates the aforementioned results of analyses.

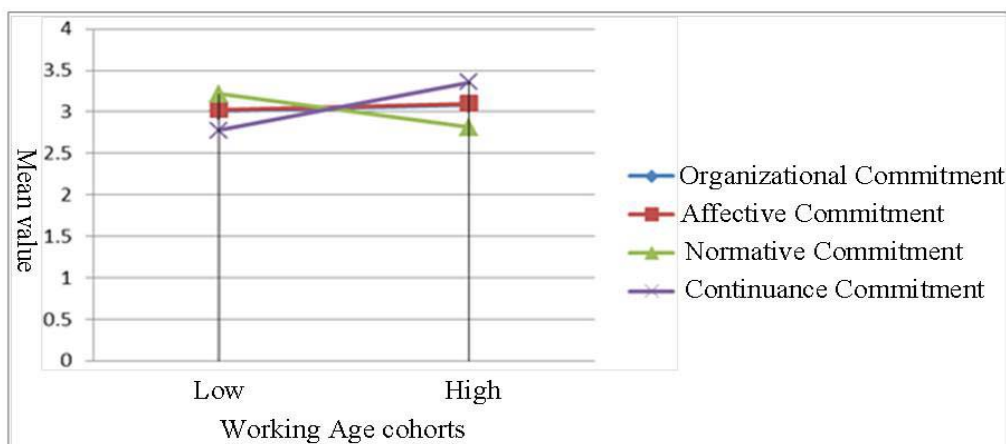


Figure 6- 3Distinctions of Organizational Commitments and Various Dimensions among Groups of Different Seniorities

Take the seniority group as the factor, and do ANOVA for HPWP system and their dimensions respectively, and the result is same as the above-mentioned result. HPWP system has a significant distinction between the two groups ($P<0.01$); the procedural justice has a significant distinction between the two groups ($P<0.001$) and the comprehensive salary and information sharing have non-significant distinction between the two groups ($P>0.10$). This relationship is shown by Diagram 6-4.

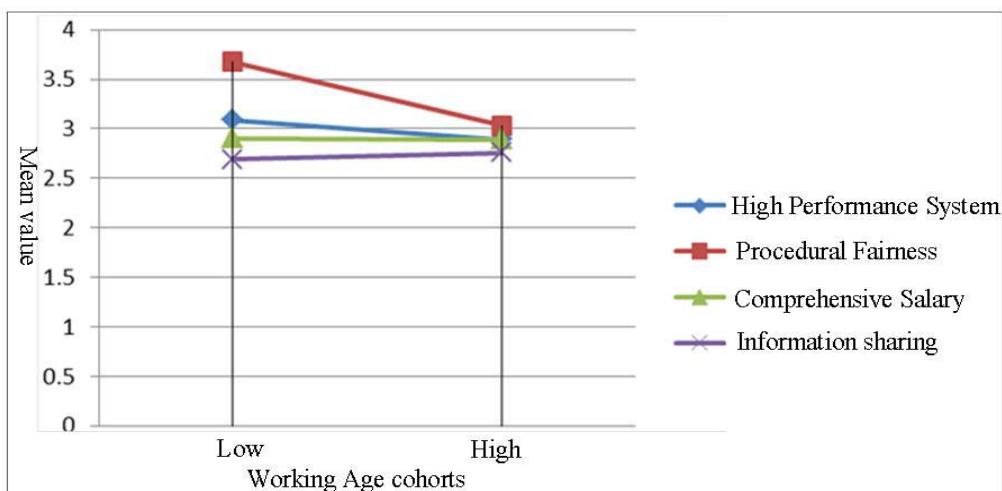


Figure 6- 4 Distinctions of HPWP system and Various Dimensions among Groups of Different Seniorities

The gender has a significant negative correlation with the continuous commitment and the HPWP system ($P < 0.05$), that is to say the female tends to stay in the original enterprise and the evaluation of HPWP system by the female is relatively lower.

Divide group based on the gender, and do ANOVA for Organizational Commitments and various dimensions, merely continuous commitment in organization is displayed as obvious distinctions ($P < 0.05$).

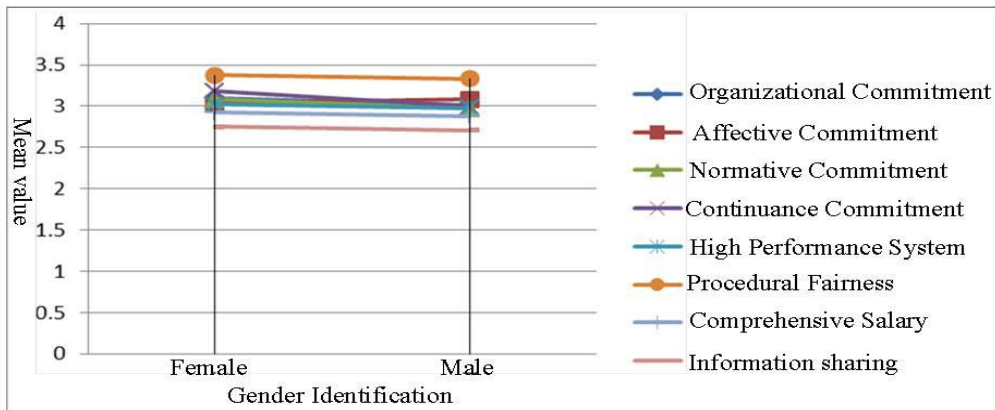


Figure 6- 5 Distinctions of Organizational Commitments, HPWP system and Various Dimensions on Genders

Take educational level as the factor and do ANOVA for Organizational Commitments, HPWP system and Various Dimensions, there is a significant distinction between Organizational Commitments, HPWP system and Various Dimensions at different educational level ($P < 0.001$).

Map the mean value of various education level groups on Figure 6-6 and we can find the Organizational Commitments, HPWP system and Various Dimensions have obviously changes with different educational levels. The junior college group has a lowest level in Organizational Commitments, HPWP system and Various Dimensions; the lower education level than the junior college level, the higher the related level, meanwhile, the higher education level than the junior college level, the higher the related level. But it is noted that the above status is a rough trend, if it's specific to each dimension, the change rule is different.

Make ANOVA for Organizational Commitments, HPWP system and Various Dimensions based on different posts. We can find there is a significant distinction between Organizational Commitments, HPWP system and Various Dimensions at different educational level ($P < 0.001$).

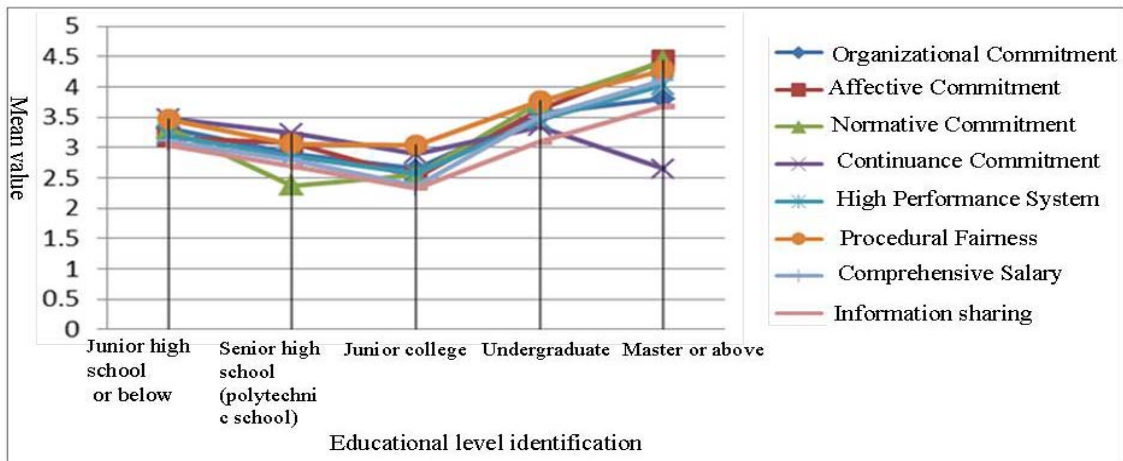


Figure 6- 6 Distinctions of Organizational Commitments, HPWP system and Various Dimensions on Different Educational Levels

Divide into groups based on the post, and map the Organizational Commitments, HPWP system and Various Dimensions in each group onto Figure 6-7. We can find Organizational Commitments, HPWP system and Various Dimensions are at the lowest level in the production position; it's at the higher level in the technical position and it's at the highest level in management position.

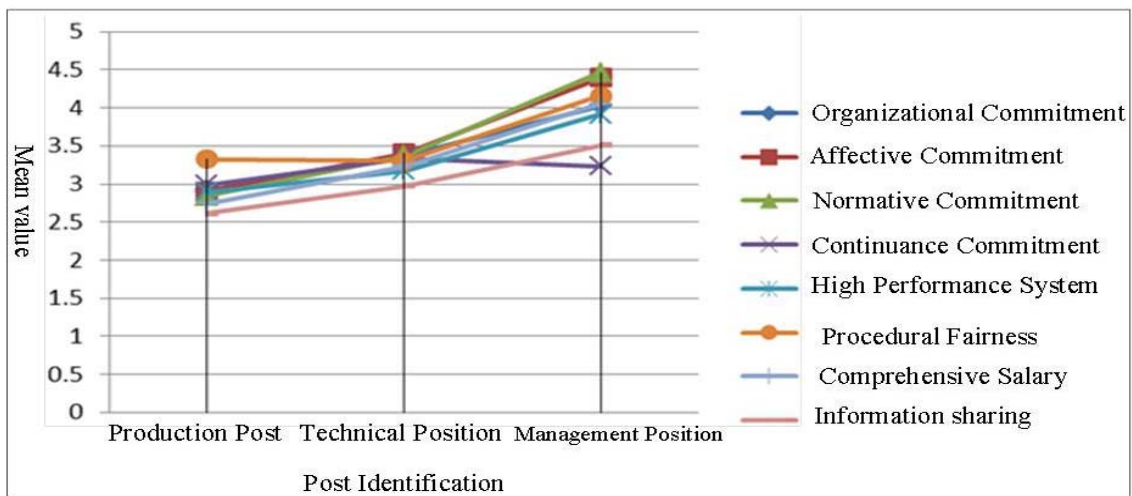


Figure 6- 7 Distinctions of Organizational Commitments, HPWP system and Various Dimensions on Different Working Positions

From the above relations between Organizational Commitments, HPWP system and Various Dimensions with the gender, age, seniority, education background and post, we can find there is a generally significant correlation between the personnel identity with Organizational Commitments and its Dimensions, and HPWP system and Various Dimensions ($P < 0.05$). Hypotheses H1a: different identities personnel of Organizational Commitments are supported.

Table 6- 6 Results of Simple Relevant Analysis

	1	2	3	4	5	6	7	8	9	10	11	12
Age												
Tenure	.897**											
Collective workers	.440**	.619**										
Labor workers	-.613**	-.489**	-.333**									
Rural electrician	.208**	.088	-.333**	-.333**								
OC	.073	-.078	-.273**	-.445**	-.058							
Affective commitment	.120*	-.092	-.297**	-.563**	.062	.874**						
Normative commitment	-.141**	-.278**	-.432**	-.164**	-.237**	.861**	.728**					
Continuous commitment	.245**	.261**	.173**	-.343**	.087	.561**	.252**	.168**				
HPWP	-.133**	-.329**	-.570**	-.155**	.003	.710**	.722**	.745**	.107*			
Procedural justness	-.317**	-.503**	-.704**	.137**	-.105*	.579**	.561**	.705**	-.011	.834**		
WOWP	.043	-.154**	-.315**	-.487**	.079	.798**	.842**	.699**	.266**	.783**	.537**	
Information sharing	.208**	.075	-.157**	-.383**	-.128*	.634**	.674**	.623**	.118*	.750**	.470**	.576**

N=400

* It has a significant correlation at 0.05 level (both sides); ** It has a significant correlation at 0.01 level (both sides), and the variables such as 1, 2, 13-20 all use the data after standard normalization.

* WOWP is the abbreviation of workers under ownership by the whole people, OC is the abbreviation of Organization Commitment.

6.3 Hypothesis Testing

By the initial regression analysis, it is found that there are many multicollinearity problems among the independent variables. The VIF values of several are close to 100. In order to avoid the bad impacts of the multicollinearity, it is must be standardized the values of High Performance Working Practice system (HPWP system), organizational commitments and their various dimensions before the further analysis on dates. And then normal distribution test is made on the all continuous variables. If its skewness or kurtorsis is 1.96 times the standard error: it is thought that there is a big contrast between its distribution and the normal distribution and the Tukey algorithm is taken to normalize it. Then, retest the normal distribution. If the contrast is still big, then Blom, Rankit and Van der Waerden algorithm are successively taken to normalize it until the appearance of a better result.

Standardize the 10 continuous variables that are referred in dates and normal distribution test is made. The result is as shown in Table 6-7. It can be clearly seen that the variables whose absolute value of skewness is 1.96 times its standard error include HPWP system, procedural justice, comprehensive salary system, affective commitments and continuous commitments. All variables (statistics in Table are marked with boldface) are included whose absolute value of kurtosis is 1.96 times the standard error apart from the effective commitment.

Therefore, firstly normalize these variables with Tukey algorithm and then a normal test is made on the obtained normalized scores. The result is as shown in Table 6-8. It is obvious that almost the skewnesses of all variables are extremely close to 0 and the absolute values of kurtosis are far less than the 1.96 times its standard error ,which can be thought to be very close to normal distribution and well suit to the subsequent analysis. To improve the stability of dates-process, the results are compared to those with Blom algorithm and it is found that the normal results with Tukey algorithm are relatively better.

Table 6- 7 The Normal Distribution Test on Continuous Variables

	N	Minimum	Maximum	Mean Value	Standard Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Standard Error	Statistic	Standard Error
Age		24	54	37.82	8.12	-.11	.12	-1.30	.24
Tenure		2	33	14.89	8.623	.03	.12	-1.30	.24
HPWP		-.98	0.58	.00	.5699	.75	.12	-.52	.24

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Procedural justice		-2.56	2.02	.00	1.000	-.48	.12	-.76	.24
Comprehensive salary		-3.26	1.88	.00	1.00	-.69	.12	.50	.24
Information share		-2.48	1.91	.00	1.00	-.08	.12	-.71	.24
OC		-1.15	1.54	.00	.54	.28	.12	-.43	.24
Affective commitment		-2.91	2.00	.00	1.00	-.41	.12	-.23	.24
Normative commitment		-2.24	2.07	.00	1.00	.15	.12	-1.13	.24
Continuous commitment		-3.40	3.03	.00	1.00	-.90	.12	1.32	.24
N (list)	400								

Table 6- 8 The Results of Normal Test after Normalization

	N	Mean Value	Standard Deviation	Skewness		Kurtosis	
		Statistic	Statistic	Statistic	Standard Error	Statistic	Standard Error
Age		.001542	.9860235	.028	.122	-.212	.243
Tenure		.005914	.9752866	.104	.122	-.335	.243
HPWP		.000232	.9945754	.005	.122	-.105	.243
Procedural justice		.000393	.9940516	.009	.122	-.120	.243
Comprehensive salary		-.000216	.9923658	-.005	.122	-.161	.243
Information sharing		-.000002	.9917293	.000	.122	-.175	.243
OC		.000594	.9934316	.014	.122	-.134	.243
Affective commitment		.000400	.9928876	.010	.122	-.144	.243
Normative commitment		-.000174	.9943167	-.004	.122	-.109	.243
Continuous commitment		.000564	.9933589	.014	.122	-.135	.243
Valid N (list state)	400						

6.3.1 Distinction of Organizational Commitments and Their Various Dimensions at Personnel Identity

Assume that the identity natures of the personnel are thought to be different by H1a, H1b, H2a, H2b, H3a, H3b, H4a and H4b. It will be shown a significant contrast in organizational commitments level. It is believed that the organizational commitments level of workers in enterprises owned by the whole people is highest and the next successively are: workers in enterprises of collective ownership, labor workers and rural electricians. To test this series of hypothesis, one-way analysis of variance is taken. The question whether there exists a significant contrast among the personnel organizational commitments levels of four different

personnel identities is checked by using LSD test and the corrected Bonferroni test. Meanwhile the up-down order is determined. According to the SPSS documents, LSD merely t-test on the whole multiple comparison several times while it never corrects the significant level of single test (to ensure the refusal rate). So its results can only be seen as general reference and its practical application value is little. Bonferroni is a kind of correction method of multiple comparisons used frequently in SSPS software. It t-tests on the whole multiple comparisons. But it corrects the significant level of the single test. It is a good choice to use Bonferroni (according to SPSS introduction) when there are not many compared number groups. To compare with each other the results of the two tests are stated in the following.

First, one-way analysis of variance is made on the organizational commitments, it is shown that there exists a significant contrast among the organizational commitments level groups. It can be seen from the Figure 6-8 that the organizational commitments of workers in enterprises owned by the whole people is highest, rural electricians and workers in enterprises of collective ownership are next, and the labor workers are last. Assume H1a is supported, but the hypothesis H1b is supported partly.

We should note that the organizational commitments of rural electricians rank the second in the list, which are not in accordance with the former hypothesis. The possible causes lie in the job in Electric Power Bureau can afford the rural electricians a more superiority feeling of identity than the people in the same village (for instance, partners in childhood). Therefore, they present a higher organizational commitments level.

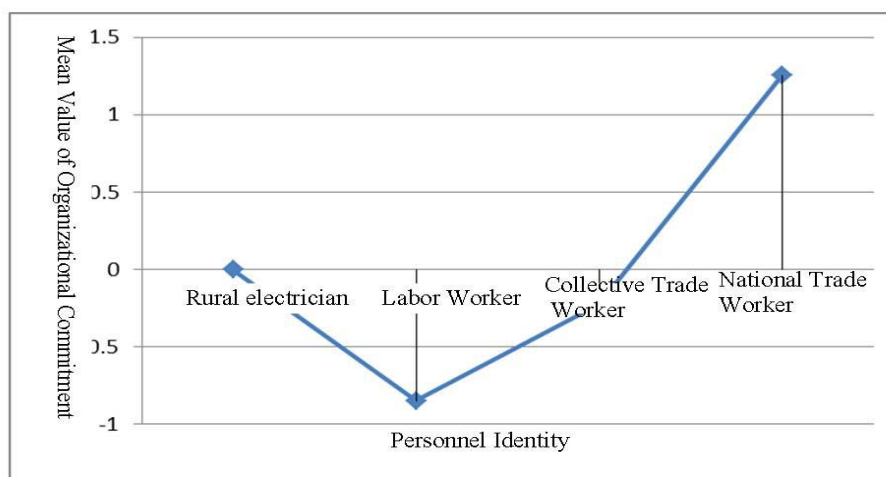


Figure 6- 8 Relationship between Organizational Commitments and Personnel Identity

In order to further research on the relationship between the contrast in personnel identity and organizational commitments, the one-way analysis of variance is made on the three dimensions of organizational commitments. The interblock significant contrasts ($P < 0.001$) are

presented. So hypothesis H2a, H3a, H4a is supported. But we should note that in terms of continuous commitments interlock variance only takes up 13%, which explains that the contrast of continuous commitments of personnel groups with different personnel identities is relatively little. It is in great accordance with the above related analysis.

For specification, it is shown in the results of LSD test and Bonferroni test that personnel identity has different relationships with different dimensions in the three dimensions of organizational commitments.

(1) Affective commitments

In the dimension of affective commitments, there are significant distinctions existing among between every two ones of the four samples within the results examined by Bonferroni ($P < 0.001$). The affective commitments level of workers in enterprises owned by the whole people is highest while the labor worker is lowest, workers in enterprises of collective ownership ranks lower level. We should note that the affective commitments level of the rural electricians is only next to workers in enterprises owned by the whole people ranking second in lists and is far higher than those of labor workers and workers in enterprises of collective ownership. Hypothesis H2b is partly supported. Based on the author's experience and research on the related personnel, we know that in spite of the position of rural electricians in Electric Power Bureau as the most unstable and the lowest relative salary, the status as "staff in Electric Power Bureau" improves their social positions. This psychological effect is very important to rural electricians. But it is added to its belonging administration. Further, in the background of Chinese culture, especially in the rural, the person with the personnel identities of government departments, traditional state-owned enterprise enjoys an extremely high value of social identity. The high level of affective commitment of the rural electricians and that of workers in enterprises owned by the whole people come from different causes. The above changing situations are as shown in Figure 6-9:

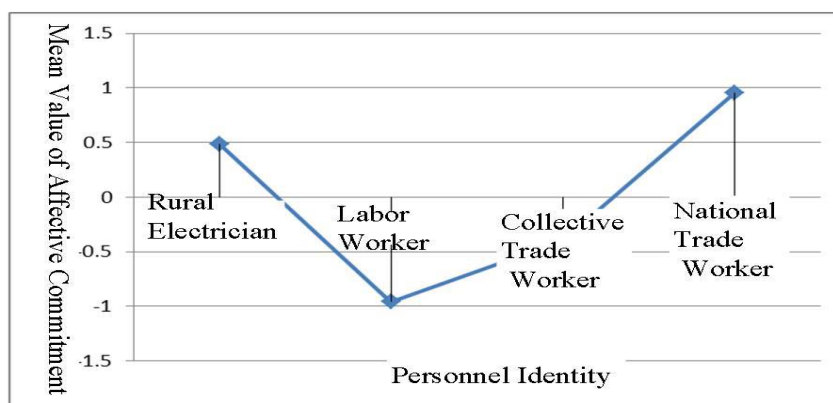


Figure 6- 9 Relationship between Personnel Identity and Affective Commitments.

(2) Normative Commitments

Based on dimension of normative commitments, the distinction between employees in collective enterprises is not obvious ($P>0.1$), while significant distinctions exist in other pairs ($P<0.001$). Workers in enterprises owned by the whole people have the highest level and then the labor workers, and then the workers in enterprises of collective ownership. Rural electrician is in the lowest level. Therefore, H3b obtains part of support. In other words, the level of normative commitments of workers in enterprises owned by the whole people is the highest, significantly higher than the average level. The normative commitments of labor workers are equal to average level. The level of workers in enterprises of collective ownership and rural electrician is relatively lower by compared with others, but slightly lower than average level. The difference of normative commitments between workers in enterprises owned by the whole people and rural electrician is small, as is shown in Figure 6-10.

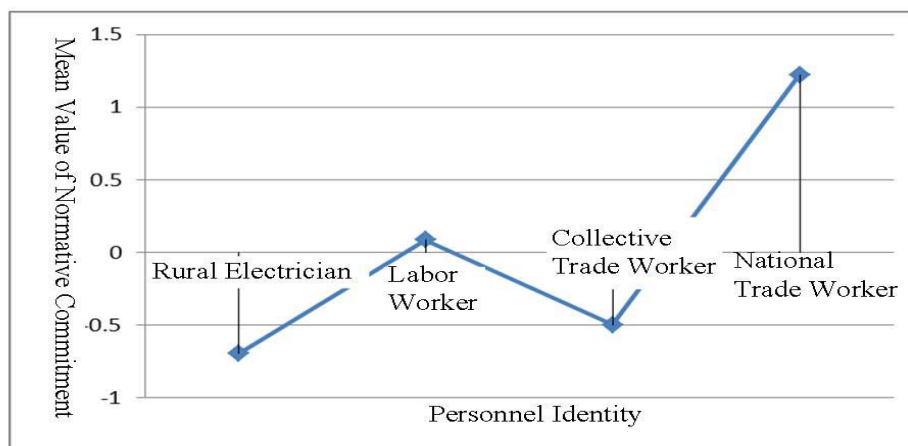


Figure 6- 10 Relationship between Personnel Identity and Normative Commitments

(3) Continuous Commitments

There is no significant distinction between rural electricians and employees in enterprise owned by the whole people in the dimension of continuous commitment, while the differences of employees in enterprise owned by the whole people from labor workers and employees in collective enterprises are both the obvious $P<0.05$. Workers in enterprises of collective ownership and rural electrician have higher average level of continuance commitments, workers in enterprises owned by the whole people have the lower level and labor workers are lowest. Therefore there is not much dependency between labor workers and the current service of power enterprises, so it shows the lower level of continuance commitments. The change is presented in Figure 6-11. It should be noted that the average level of continuance commitments of workers in enterprises of collective ownership is the highest but it is close to average level which means the difference on continuance

commitments level among identity groups of different personnel is small. It can be seen that the difference due to personnel identity is only about 13% of total distinctions of continuance commitments. And there are some other elements, such as income level and educational level and so on. Therefore, H4b doesn't get support.

It is concluded that providing H1 and the below get part of support.

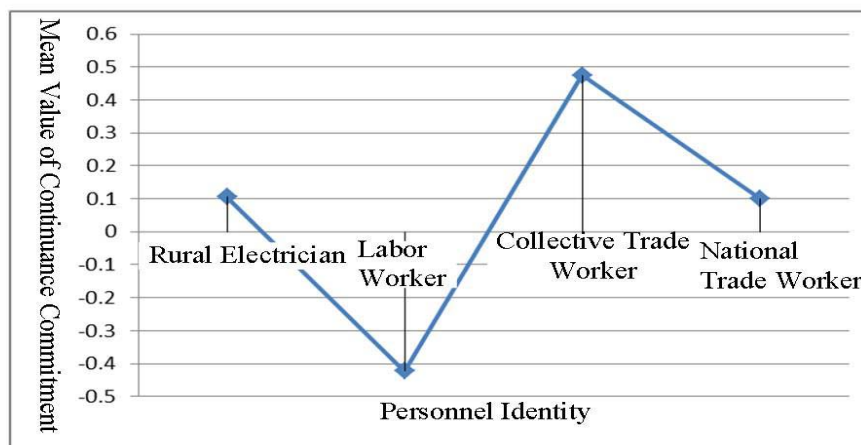


Figure 6- 11 Relationship between Personnel Identity and Continuance Commitments

6.3.2 Effect of Implementing HPWP system on Personnel Evaluation

To test whether organization implementing HPWP system will influence the personnel evaluation of HPWP system practice, mark the unit of HPWP system which had been carried out as “1” and the one which hadn't been implemented as “0”, and analyze on signal factor variance of organizational commitments and various dimensions.

The results of variance shows that the unit of HPWP system is significantly different between implementing EPMS and without implementing EPMS ($P < 0.05$). From the perspective of three dimensions, the procedural justice between two groups is significantly different ($P < 0.05$), comprehensive salary between the two groups is significantly different ($P < 0.05$), but information sharing between the two groups is not significantly different ($P > 0.1$).

The mean value of two sets of data is described as Figure 6-12. It can be seen that the personnel evaluation of HPWP system and three dimensions are higher in implementing HPWP system than without implementing it in HPWP system unit; Even though the two groups' difference of information sharing is not significant ($P > 0.01$), from the Figure, it can be seen that the score on personnel information sharing with carrying out HPWP system is still higher than without it in the HPWP system unit.

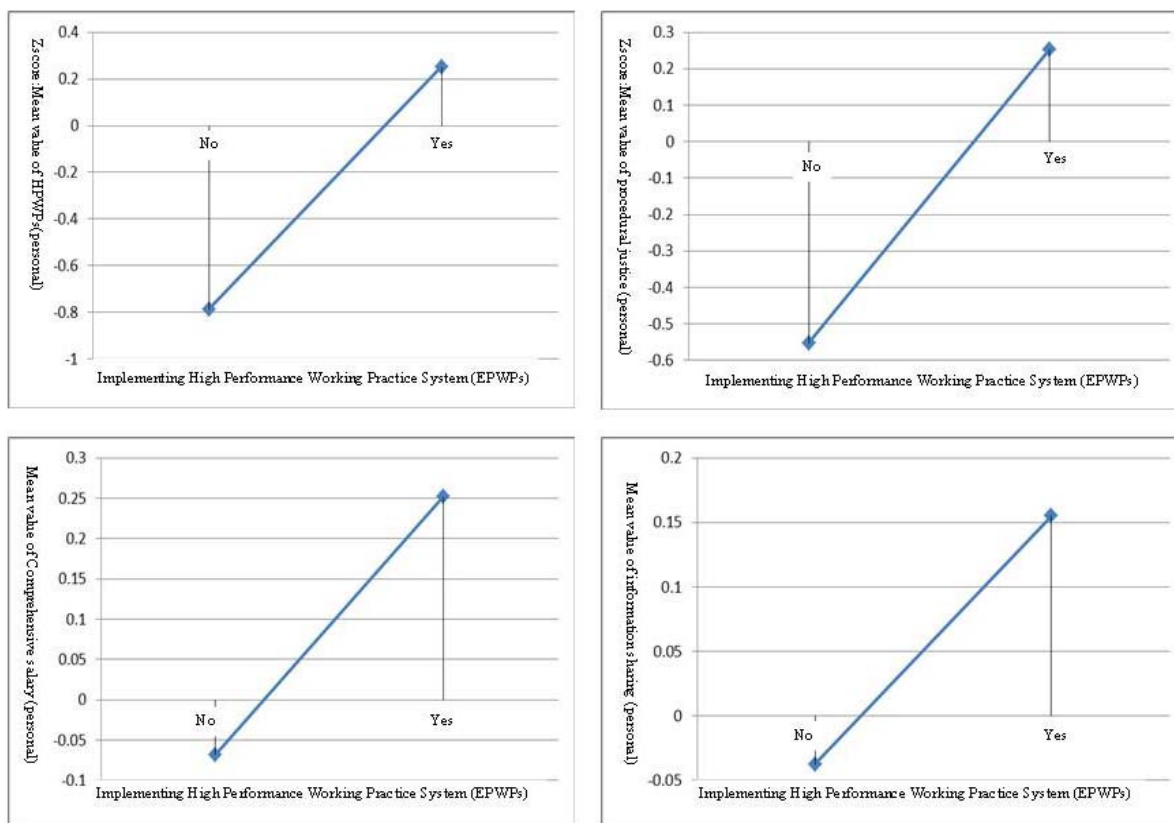


Figure 6- 12 Effect of Implementing HPWP system on Personnel Evaluation

6.3.3 Effect of Implementing HPWP system on Organizational Commitments and Various Dimensions

To further examine whether organizations implement HPWP system will affect personnel' organizational commitment and various dimensions level, and the direction of the effect, mark "1" for units of HPWP system having implemented and "0" for those who do not, then conduct a one-way analysis of variance of organizational commitment and various dimensions based on this factor.

The result of analysis of variance is showed that significant difference exists between the organizational commitment level of units implementing HPWP system and those not implementing ($p < 0.01$). Seen from the three dimensions, difference between affective commitment and between continuance commitment of the two groups is respectively significant ($p < 0.01$) while difference between normative commitment not significant ($p > 0.10$).

Specifically, in comparison with units of organizational commitments not implementing HPWP system, units implementing EWPS performs at a higher average which is more than

3.20, while the average level of organizational commitments of units not implementing HPWP system is about 3.00. As shown in Figure 6-13:

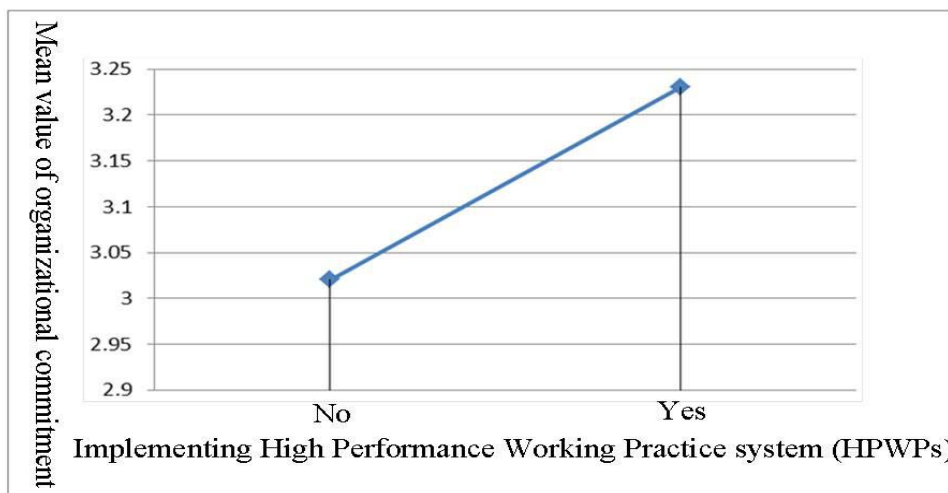


Figure 6- 13 Effect of Implementing HPWP system on the Level of Organizational Commitments

Compared with units affective commitments not implementing HPWP system, the average level of units implementing is a little more than 3.27. And the average level of organizational commitments of units not implementing is about 3.01, as shown in Figure 6-14:

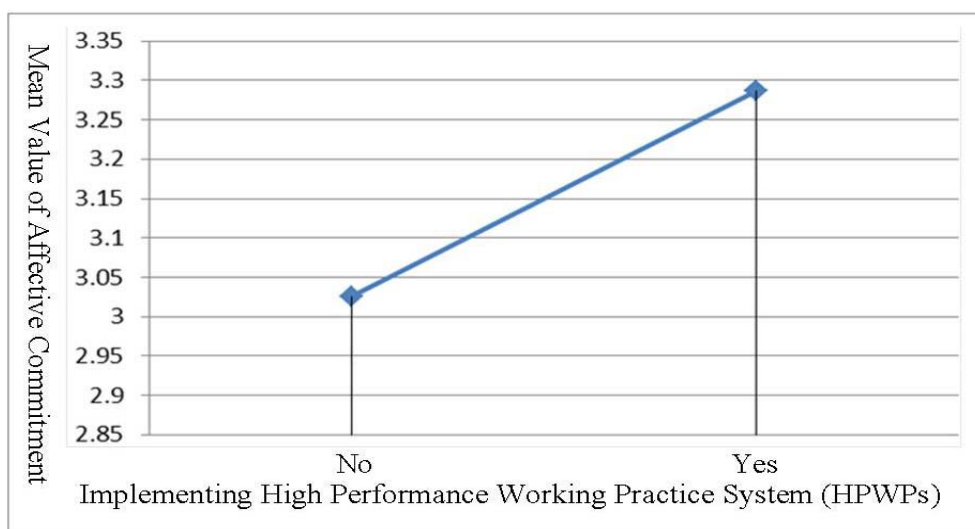


Figure 6- 14 Effect of Implementing HPWP system on the Level of Affective Commitments

The difference between unit's normative commitments implementing HPWP system and units not implementing is minimal. The average level of units implementing is about 3.10 while the average organizational commitments level of units not implementing is about 2.99, as shown in Figure 6-15:

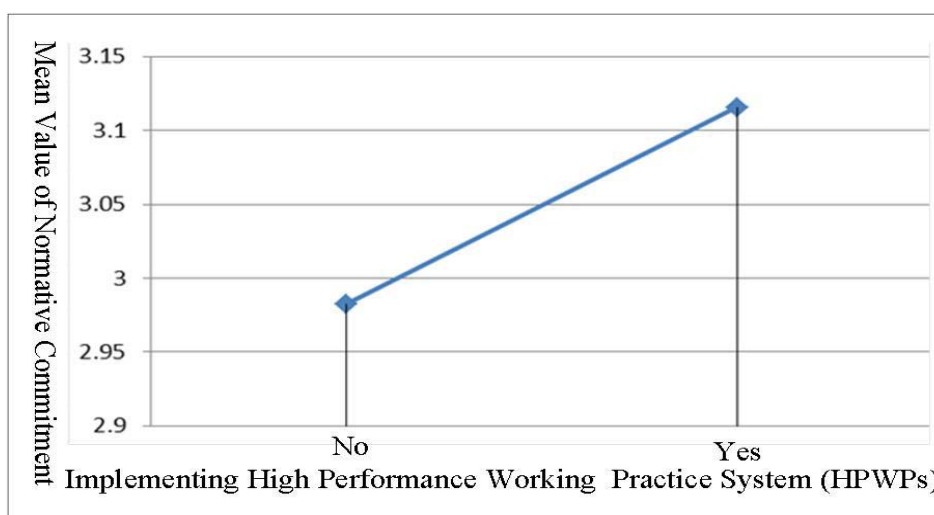


Figure 6- 15 Effect of Implementing HPWP system on the Level of Normative Commitments

Compared with units continuous commitments not implementing HPWP system, the average level of units implementing is close to 3.30. And the average level of units not implementing is about 3.01, as shown in Figure 6-16:

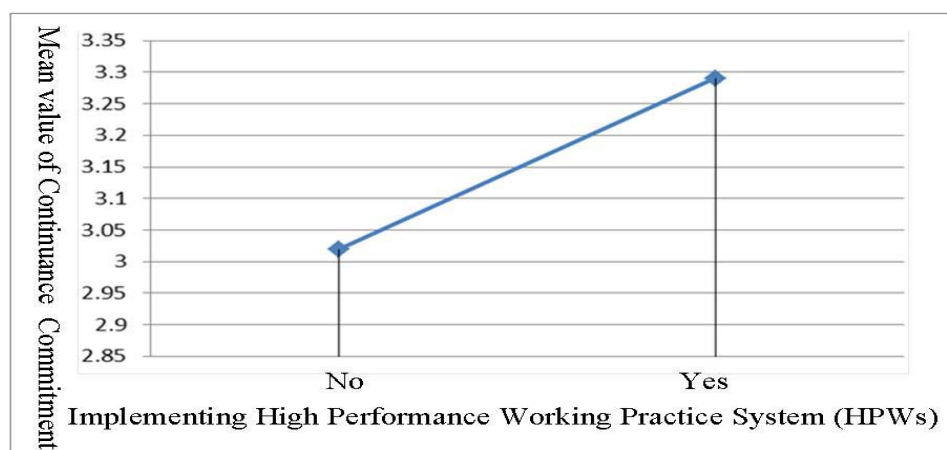


Figure 6- 16 Effect of Implementing HPWP system on the Level of Continuance

Commitment From the above results, we can see that hypothesis H6 and its underlying hypothesis H6a, H6c have received preliminary support. And normative commitments are not affected significantly by the implementation of HPWP system seen from the results of analysis of dimensions.

6.3.4 Analysis of Variations Grouped in Terms of Personnel Identity

Hypothesis H6 considers that implementing HPWP system will make personnel' organizational commitments level higher relative to personnel not implementing, and hypothesis H6a to H6c consider that implementing HPWP system will make levels of

affective commitments, normative commitments and continuance commitments of personnel of various identities relatively higher. Based on the above section, this section will further examine these hypotheses.

Grouping the data into four data sets in terms of personnel identity, and conducting analysis of variations in each set respectively taking implementing HPWP system as the factor in order to view whether there exist differences about the factor on personnel groups of different personnel identity.

Conducting a one-way analysis of variance on the data set of workers in enterprises owned by the whole people, the results shows that there is significant differences exist between organizational commitments level of the two groups ($p < 0.001$), and the difference of Among groups is also significant in the three dimensions of organizational commitments ($p < 0.05$). Therefore, hypothesis H6 and its underlying hypothesis H6a, H6b, H6c are supported.

For workers in enterprises owned by the whole people, the effect of implementing HPWP system on organizational commitment and the average of its three dimensions can be represented as Figure 6-17. We can see that the average level of workers' organizational commitment is about 4.13 in units implementing HPWP system while units not implementing is about 3.84; the difference is obvious. In units implementing HPWP system, the average level of workers' affective commitment is about 4.42 while units not implementing is about 4.11; the difference is relatively obvious. In units implementing HPWP system, the average level of workers' normative commitment is about 4.51 while units not implementing are about 4.32; the difference is also relatively obvious. In units implementing HPWP system, the average level of workers' continuance commitment is about 3.45 while units not implementing are about 3.45; the difference is great.

Conducting the above analysis on workers in enterprises of collective ownership, the results shows that there is no significant difference between units organizational commitment and the three dimensions implementing HPWP system and units not implementing ($P \geq 0.05$).

Conducting the above analysis of the data set of labor workers, the results shows that there is significant difference between units affective commitment, normative commitment and continuance commitment implementing HPWP system and units not implementing ($p < 0.001$). For units implementing HPWP system, labor workers' average level of affective commitment, normative commitment and continuance commitment is significantly higher than those not implementing. These results could be described by Figure 6-18 for vivid

manifestation of the differences among various phases.

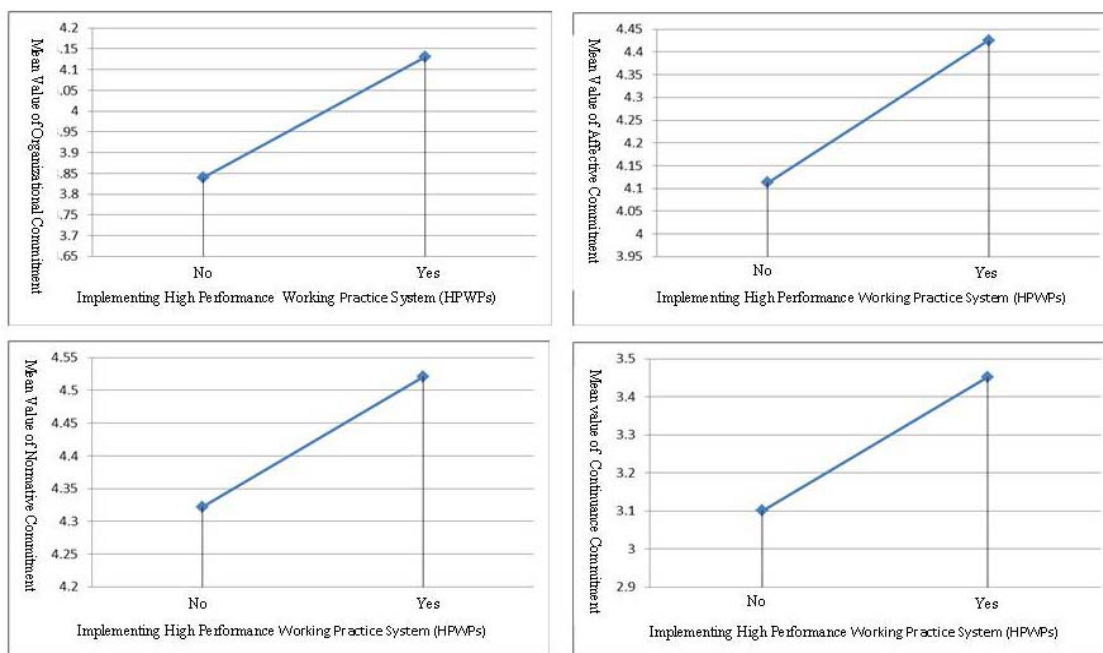


Figure 6- 17 Effect of Implementing HPWP system on Workers in Enterprises Owned by the Whole People

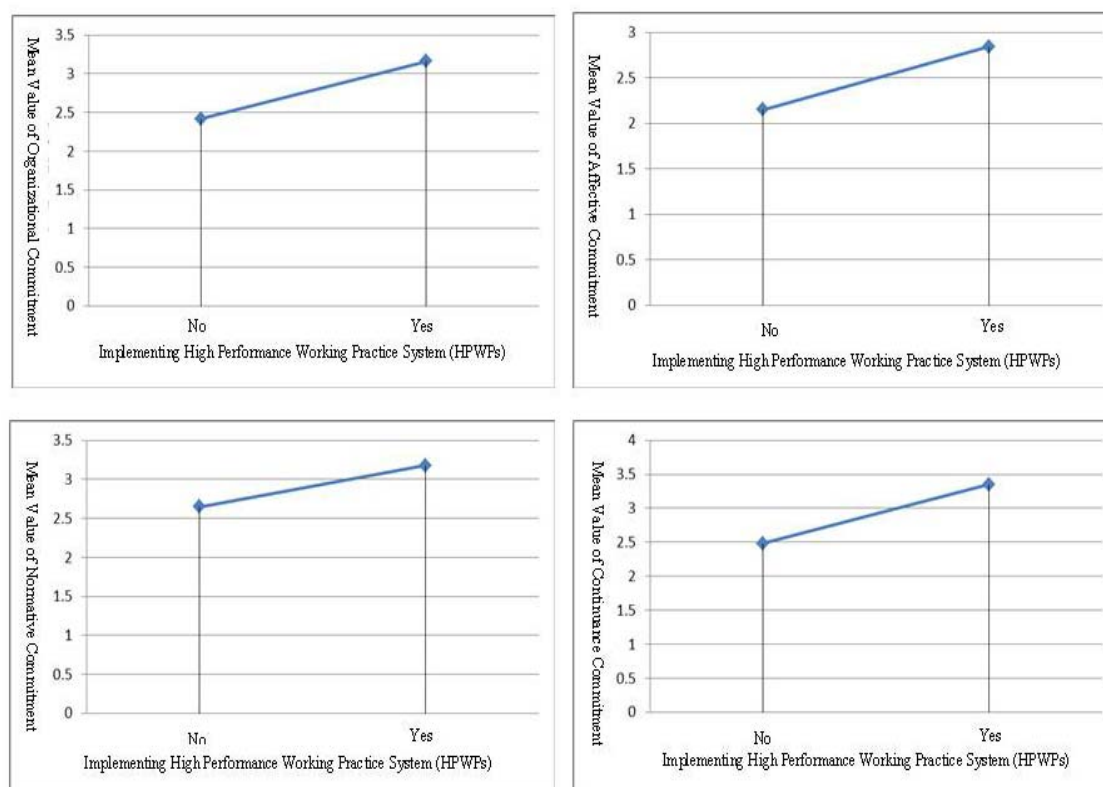


Figure 6- 18 Effect of Implementing HPWP system on Labor Workers

Conducting the above analysis on the data set of rural electricians, the results shows that there is no significant difference between units affective commitment and continuance commitment implementing HPWP system and those not implementing ($p > 0.1$), and only

normative commitment has significant difference between the two groups in the three dimensions of organizational commitment ($p < 0.05$).

We can see that for rural electricians, the normative commitment average level of units implementing HPWP system is lower than those not implementing. A possible reason is that HPWP system strengthens the supervision and examination of work quantity and quality, and rural electricians whose education level and learning ability are relatively low may feel great pressure from it, thereby their normative commitment level is reduced. The aforementioned results are drawn into the vivid Figure 6-19, from which it could be seen that.

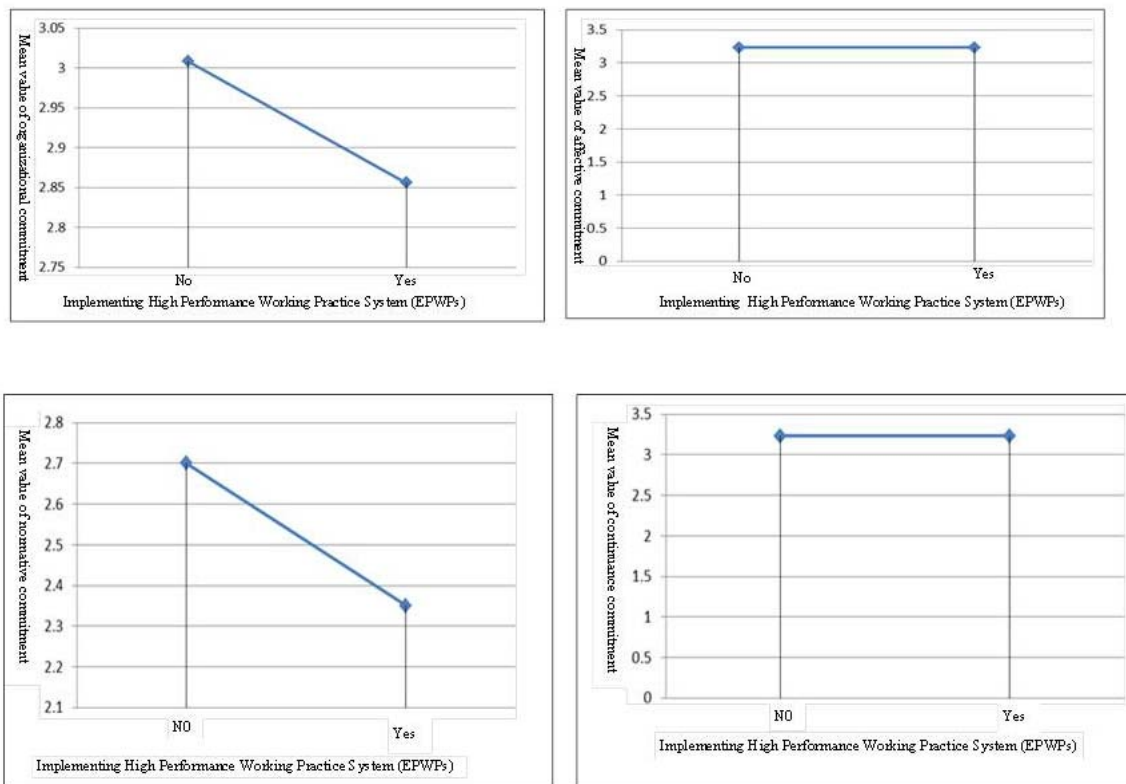


Figure 6- 19 Effect of Implementing HPWP system on Rural Electrician

6.3.5 Regression Analysis

Seen from what is analyzed above, there is distinction of the personnel organizational commitments standard on personnel with different identities. And implementing HPWP system does bring effect on organizational commitments of various personnel, which inspects the hypothesis mentioned before. In this section, we are expected to search further on such effecting mechanism through Regression Analysis so as to test the moderating effect of HPWP system evaluated by personnel between personnel identity and organizational commitments.

We regard the organizational commitments and three dimensions as dependent variables

respectively as follows, and structure regression model to test if HPWP system and various dimensions have an obvious moderating effect between personnel identity and organizational commitments. The evolution on HPWP system given by personnel can be gained from questionnaire survey, which is shown as follows:

(1) Analysis of effect and moderating effect on organizational commitments by HPWP system.

See organizational commitments as dependent variables and adopt ‘enter’ to structure regression model. The model M1a includes all control variables and model M1b includes control variables, employment identity and HPWP system while model M1c contains all control variables, personnel identity, HPWP system and interaction between personnel identity, HPWP system where it can be given after correlation variables are normalized and then multiplied to reduce the colinearity between variables maximum. Use dummy variables to handle classified qualitative variables, so do later section involving such continued regression analysis.

Use three dummy variables to represent personnel identity shown is Table 6-9:

Table 6- 9 Setting up Dummy Variables for Personnel Identity

personnel identity	workers in enterprises of collective ownership	labor workers	rural electrician
Enterprises owned by the whole people	0	0	0
Workers in Enterprise of Collective Ownership	1	0	0
labor workers	0	1	0
rural electrician	0	0	1

Use two dummy variables to represent posts shown in Table 6-10:

Table 6- 10 Setting up Dummy Variables for Working Position

Working Position Category	Professional Skill	Working Position
Management Working Position	0	0
Professional Skill Working Position	1	0
Production Working Position	0	1

The results of regression analysis can be seen in Table 6-11. If conducting a VIF testing on variables in various models, the variance inflation factor (VIF) of all variables in models are < 10, indicating that unacceptable collinearity problem does not exist.

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Table 6- 11 Moderating effect on the Relationships between Personnel Identity and Organizational Commitments by HPWP system

Independent Variables	M1a	M1b	M1c
1. Workers in Enterprise of Collective Ownership		-.742***	-.884***
2. Labor Workers		-1.185***	-1.149***
3. Rural Electrician		-.752***	-.659***
4. HPWP system Interaction Effect		.153***	.169*
5. HPWP system * Workers in Enterprise of Collective Ownership			-.230**
6. HPWP system * Labor Workers			.035
7. HPWP system * Rural Electrician control variables			.229*
8. Age	.162*	-.171**	-.124*
9. Working Age	-.178**	.077	.028
10. Sex	-.097*	-.056	-.089*
11. Junio High School and Under	-.297*	.691***	.561***
12. Senior High School or Technical Secondary School	-.725***	.184	.077
13. Junior College	-.922***	.097	.129
14. Undergraduate College	-.147	.219**	.248**
15 Professional Skill Working Position	-.213	-.221*	-.241**
16. Production Working Position	-.381**	-.218*	-.214*
17. Unit Dummy Variable	Include	Include	Include
F	23.48***	50.93***	.770
Ajusted R ²	.504	.734	.754
R ²	.526	.748	.770
ΔR ²		.222***	.022**

N=400, * P<0.05, ** P<0.01, *** P<0.001

Note: The models also include nine dummy variables as control variables, which is structured in accordance with 10 units. Briefly, they aren't listed in the table; Coefficients are not standardized; ΔR² series can be obtained from comparison between this model and the previous model

We see that personnel identity has an obvious effect on organizational commitments standard. The organizational commitments standard of enterprises owned by the whole people is on the top, and then is workers in enterprises of collective ownership and rural electrician while the organizational commitments standard of labor workers is the lowest. This conclusion is concordant with the result of variance analysis mentioned before.

Compare model M1b and M1c, ΔR² = 0.022 (P<0.01) . It certifies that there is a significant moderating effect on the relationship between personnel identity and

organizational commitments by HPWP system. Assume that H7 is supported; regard the media of HPWP system evaluation as boundary to classify the data into two groups; then according to the different identities of staff, divide each group into four small groups respectively and get each mean value. Use personnel identity as abscissa axis while the mean value of each group's organizational commitments is used as vertical axis. In this way can get a figure as shown in 6-20. As it can be seen, in the group which has high evaluation on HPWP system, the personnel organizational commitments are obvious higher than the low-standard group. Thus, when it comes to what is mentioned in 6.3.2 section in this text, implementing HPWP system brings a significant effect on implementing HPWP system evaluation by personnel, the result shown here indicates that HPWP system would enhance personnel organizational commitments standard of various personnel identity. Meanwhile, we can also see that, when HPWP system evaluation is in different standard, there is an obvious distinction on the change of organizational commitments standard of staff having four different personnel identities, of which enterprises owned by the whole people increase fastest on the high HPWP system evaluation compared with the organizational commitments standard of low HPWP system evaluation, and then is rural electrician, and labor workers is ranked the third as workers in enterprises of collective ownership increase slowest.

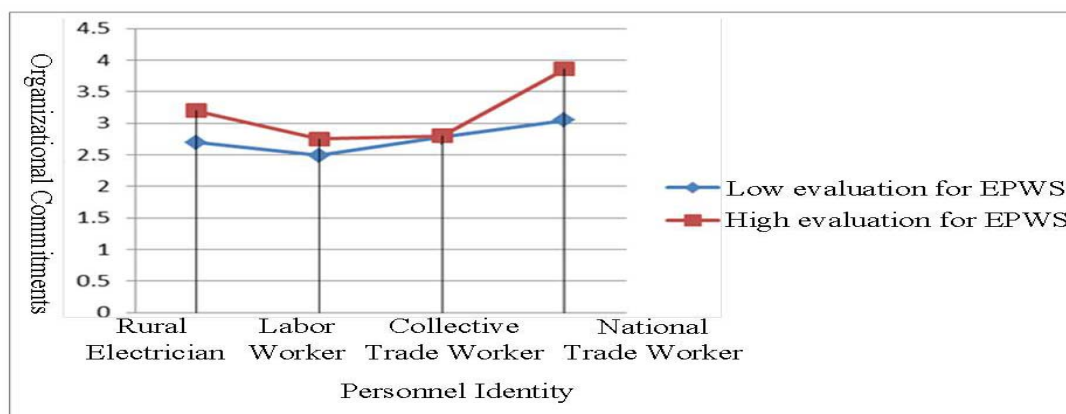


Figure 6- 20 Moderating effect on the Relationships between Personnel Identity and Organizational Commitments by HPWP system

Note: To display the objective circumstances of dependent variables more directly, use the original data during making the figure, so do the figure below and there are no notes any more.

(2) Analysis of effect and moderating effect on HPWP system and their various dimensions

In this section, we use three dimensions of organizational commitments, affective commitment, normative commitment and continuous commitment, as dependent variable. Use 'enter' to structure regression model and test the relevant Hypothesis.

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Table 6- 12 Moderating Effect on the Relationships between Personnel Identity and Affective Commitments by the Various Dimensions of HPWP system

Independent Variable	M2a	M2b	M2c
1. Workers in Enterprise of Collective Ownership		-.473***	-.840***
2. Labor Workers		-1.028***	-1.095***
3. Rural Electrician		-.341**	-.337**
4. Procedural Justice		.094**	.122
5. Comprehensive Salary		.229***	.215*
6. Information Sharing		.093***	-.002
Interaction Effect			
7. Procedural Justice * Workers in Enterprise of Collective Ownership			-.259**
8. Comprehensive Salary * Workers in Enterprise of Collective Ownership			-.040
9. Information Sharing * Workers in Enterprise of Collective Ownership			-.118
10. Procedural Justice * Labor Workers			-.061
11. Comprehensive Salary * Labor Workers			-.041
12. Information Sharing * Labor Workers			.139
13. Procedural Justice * Rural Electrician			.080
14. Comprehensive Salary * Rural Electrician			.168
15. Information Sharing * Rural Electrician			.142
Control VARIABLES	Include	Include	Include
F	32.57***	97.40***	79.54***
Ajusted R ²	.588	.853	.867
R ²	.606	.863	.878
ΔR ²		.157***	.015***

N=400, * P<0.05, ** P<0.01, *** P<0.001

Note: The models also include nine dummy variables as control variables, which is structured in accordance with 10 units. Briefly, they aren't listed in the table; Coefficients are not standardized; ΔR² series can be got from comparison between this model and the previous model. Control variables are shown in Table 6-11, and later continued regression analysis would not list the result.

Of which the first model (M2a, M3a, M4a) of each group includes all control variables. The second model (M2b, M3b, M4b) includes control variables, employment identity, three dimensions of HPWP system and interaction variables between personnel identity and three

dimensions of HPWP system. Interaction variables are got after continuous variable are standardized and then multiplied to eliminate colinearity between variables.

Conduct a VIF test on variables which the model refers and the variance inflation factor (VIF) of all variables are <10 , indicating that unacceptable collinearity problem does not exist.

For the affective commitment, as it can see, personnel identity has a significant effect on employment's affective commitment ($p < 0.01$). Assume that H2a is supported. Compare the model M2b and M2c, $\Delta R^2 = 0.015$ ($P < 0.001$), indicating that three dimensions of HPWP system, procedural justice, comprehensive salary and information sharing, have a significant moderating effect on the relationship between personnel identity and organizational commitments. Assume that H7a is supported.

For the moderating effects on the relationships between personnel identity and affective commitments by procedural justice, comprehensive salary and information sharing, Figure 6-21, Figure 6-22 and Figure 6-23 can be made according to the above block method. It can be seen that in the case of high-level procedural justice (or comprehensive salary, information sharing), the affective commitment level of personnel with various identities has risen to certain degree.

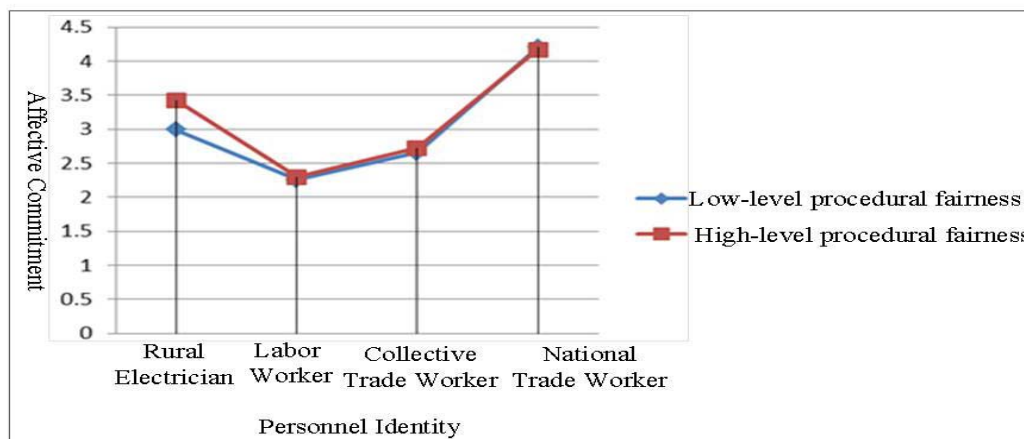


Figure 6- 21 Moderating effect on the Relationships between Personnel Identity and Affective Commitments by Procedural Justice

As shown in Figure 6-21, the moderating effect on rural electricians by procedural justice is the strongest. In the cases of both high-level procedural justice and low-level procedural justice, the affective level differences among rural electricians are the greatest. The higher-level the procedural justice is, the more probability of personnel participating in decision-making and providing suggestions is. But in the general case, rural electricians have

few chances to providing suggestions or participate in decision-making. Therefore, rural electricians' affective commitment level has risen by a wide margin in the case of high-level procedural justice. The moderating effect of procedural justice on workers in enterprises owned by the whole people is unobvious, the reasons for which may be that workers in enterprises owned by the whole people were always in preponderant positions and they belong to the "vested beneficiaries" in the established system. Generally they possessed more rights to make suggestions and more chances to make decisions, while procedural justice almost has no effect on their positions.

As shown in Figure 6-22, rural electricians are in the lowest administrative level among the whole organizational system of Electric Power Bureau. In the past experiences, rural electricians were often faced with the situation that they had much work and heavy tasks, but their reward is relatively lower. Therefore, in the case of high-level comprehensive salary system, their workload and difficulties are harder to be reflected, and that is why the affective commitment level of rural electricians has largely risen in case of high-level comprehensive salary.

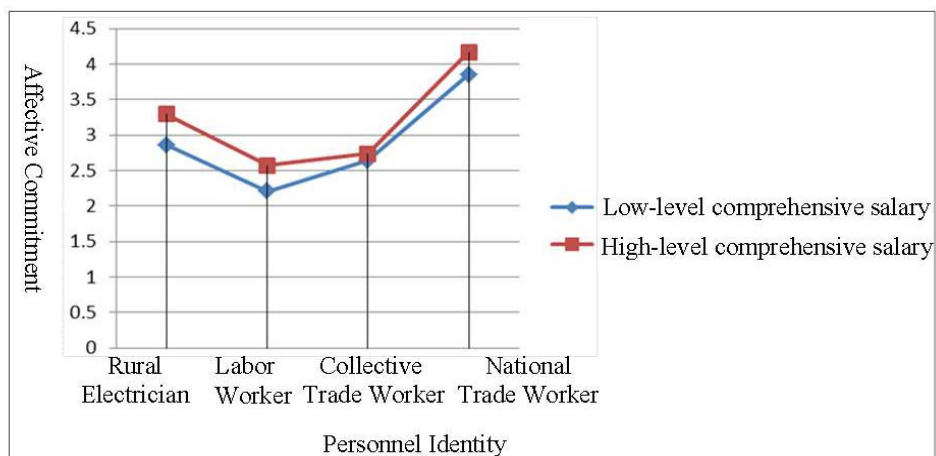


Figure 6- 22 Moderating effect on the Relationships between Personnel Identity and Affective Commitments by Comprehensive Salary

As shown in Figure 6-23, the moderating effects on rural electricians and labor workers by information sharing are the most obvious. In the case of high-level information sharing, their affective commitment level relatively has largely risen. This may because of the psychological effect brought to personnel by information sharing. Because in the case of high-level information sharing, the personnel will recognize that his grasp capacity to the surroundings has been enhanced. However, for workers in enterprises owned by the whole people and workers in enterprises of collective ownership, because they are in the rich information positions, their affective commitment level relatively has risen much less in case of high-level information sharing.

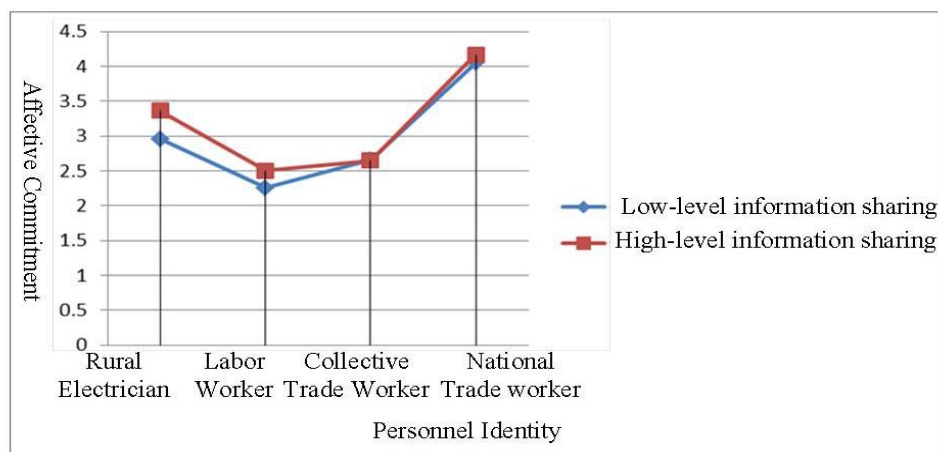


Figure 6- 23 Moderating effect on the Relationships between Personnel Identity and Affective Commitments by Information Sharing

(3) Analysis of effect and Moderating Effect on Normative Commitments by High Performance Working Practice system (HPWP system) and Various Dimensions

For normative commitments, the regression results are shown in Table6-13:

Table 6- 13 Moderating effect on the Relationships between Personnel Identity and Normative Commitments by the Various Dimensions of HPWP system

Independent Variable	M3a	M3b	M3c
1. Workers in Enterprises of Collective Ownership		-1.535***	-1.855***
2. Labor Workers		-1.215***	-1.436***
3. Rural Electricians		-1.468***	-1.590***
4. Procedural Justice		.083	.005
5. Comprehensive Salary		.219***	.188
6. Information Sharing		.082*	-.046
Interaction Effect			
7. Procedural Justice * Workers in Enterprises of Collective Ownership			.066
8. Comprehensive Salary * Workers in Enterprises of Collective Ownership			-.159
9. Information Sharing * Workers in Enterprises of Collective Ownership			-.016
10.Procedural Justice * Labor Workers			-.113
11.NZ Comprehensive Salary * Labor Workers			-.018
12.Information Sharing * Labor Workers			.134
13.Procedural Justice * Rural Electricians			.217
14.Comprehensive Salary * Rural Electricians			.238
15.Information Sharing * Rural Electricians			.209
Control Variable			

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F	27.57***	69.23***	54.14***
Adjusted R ²	.545	.804	.815
R ²	.566	.816	.830
ΔR ²		.250***	.014**

N=400, * P<0.05, ** P<0.01, *** P<0.001

Note: The model includes nine dummy variables formed according to unit ten as control variables which are not listed for brevity; the coefficients are all non-standardized coefficients; ΔR² is obtained from the comparison of this model with the former one.

It can be seen that the effect (P<0.001) of personnel identity on personnel normative commitments will be obvious, if H3a is supported. Comparing Model M3b with Model M3c, ΔR² = 0.014 (P<0.01), which proves that the three dimensions of HPWP system, namely procedural justice, comprehensive salary and information sharing have obvious moderating effects on the relationships between personnel identity and organizational commitments, if H7b is supported.

For the moderating effects on the relationships between personnel identity and normative commitments by procedural justice, comprehensive salary and information sharing, Figure 6-24, Figure 6-25 and Figure 6-26 can be made according to the above block method. It can be seen that in the case of high-level procedural justice (or comprehensive salary, information sharing), the normative commitment level of personnel with various identities has risen to certain degree.

As shown in Figure 6-24, compared with the case of low-level procedural justice, in the case of high-level procedural justice, the normative commitment level of rural electricians has risen the most, which reflects that rural electricians urges for justice and there were many practices contrary to procedural justice in the past system.

As shown in Figure 6-25, in cases of both high-level comprehensive salary and low-level comprehensive salary, the normative commitment levels of rural electricians and labor workers have risen the most, which reflects that in the actual eclectic utility industry, the relationships between “work” and “reward” is not very scientific and reasonable and do not embody the principle “equal pay for equal work”. In the aspect of system, personnel identity will result in that rural electricians and labor workers on the one hand undertake relatively more and heavier work tasks, but on the other hand face relatively lower income level. Therefore, when they recognize that the unit will practice comprehensive salary, they will expect the income advance brought by this system, so they will enhance their normative commitments.

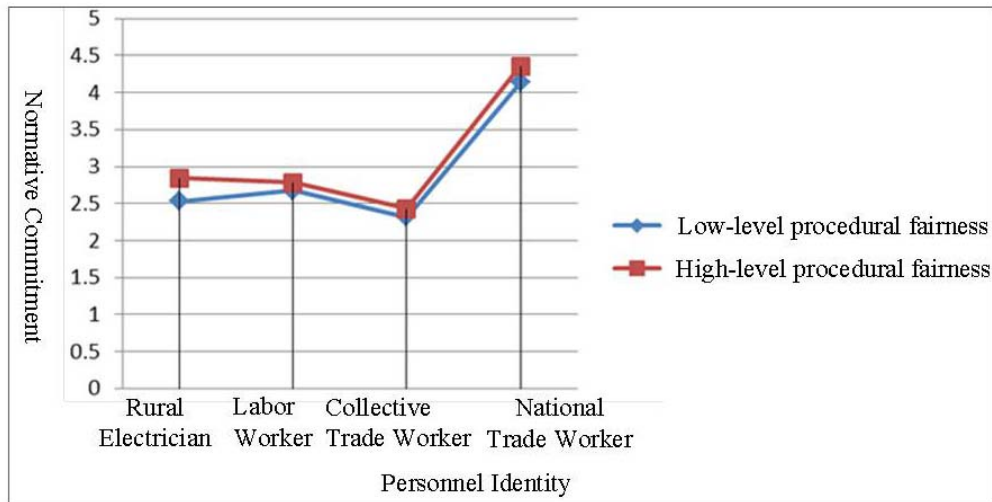


Figure 6- 24 Moderating effect on the Relationships between Personnel Identity and Normative Commitments by Procedural Justice

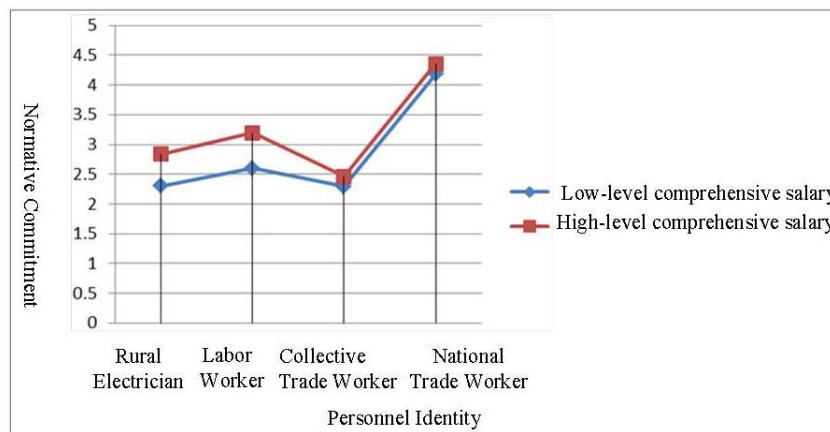


Figure 6- 25 Moderating effect on the Relationships between Personnel Identity and Normative Commitments by Comprehensive Salary

As shown in Figure 6-26, as the same with the above effect on affective commitments, the moderating effects of information sharing on rural electricians and labor workers are the most obvious. In the case of high-level information sharing, their normative commitment level relatively has largely risen. This may because of the psychological effect brought to personnel by information sharing. Because in the case of high-level information sharing, the personnel will recognize that his grasp capacity to the surroundings has been enhanced and they are the owner of the enterprise. However, for workers in enterprises owned by the whole people and workers in enterprises of collective ownership, because they are in the rich information positions, their normative commitment level relatively has risen much less in the case of high-level information sharing, as shown in the following:

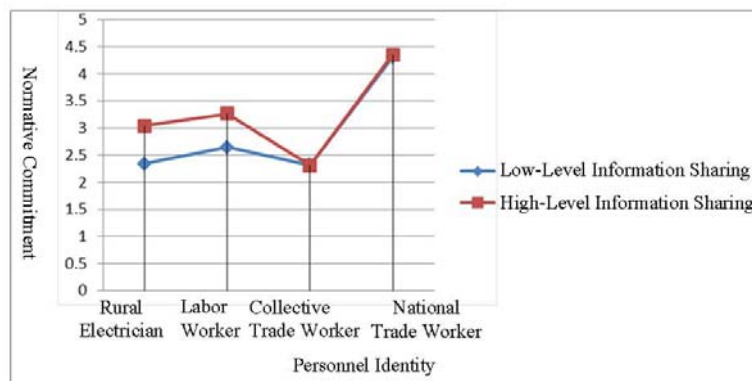


Figure 6- 26 Moderating effect on the Relationships between Personnel Identity and Normative Commitments by Information Sharing

(4) The effect of HPWP system and various dimensions on normative commitment and the analysis of its adjustment function

For the continuing commitment, the regression results are shown in Table 6-14 and Table 6-13, from which we can see that personnel identity is free from consistent and remarkable effect ($P < 0.05$) on the continuing commitment of personnel and only virtual variable “personnel of collective ownership” shows remarkable effect ($P < 0.01$) on continuing commitment provided H4a is partially supported. The comparable models M4b and M4c and $\Delta R^2 = 0.014$ ($P < 0.01$) are the three dimensions proving the HPWP system, which respectively mean procedural justice, comprehensive salary and information sharing that can have remarkable moderating effect on the relationship between personnel identity and institutional commitment. Provided H7c is supported.

It can be worked out according to the grouping methods stated above for the moderating effect of procedural justice, comprehensive salary and information sharing on the relationship between personnel identity and institutional commitment. It can be seen that the normative commitment level of personnel in various personnel identity is improved to a certain degree when the procedural justice (or comprehensive salary or information sharing) level is high.

Table 6- 14 The Moderating Function of All Dimensions of HPWP system

Independent variable	M4a	M4b	M4c
1. Workers in Enterprises of Collective Ownership		.662**	.589*
2. Labor worker		-.164	-.434
3. Rural electrician		.224	.336
4. Procedural justice		.146*	.060
5. Comprehensive salary		.223***	.040
6. Information sharing		-.059	.207

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Interaction effect			
7.Procedural justice * Workers in Enterprises of Collective Ownership			.065
8.Comprehensive salary * Workers in Enterprises of Collective Ownership			.237
9.Information sharing * Workers in Enterprises of Collective Ownership			-.495**
10. Procedural justice * Labor worker			.107
11. Comprehensive salary * Labor worker			.177
12.Information sharing * Labor worker			-.502**
13.Procedural justice * Rural electrician			.103
14. Comprehensive salary * Rural electrician			-.036
15.Information sharing * Rural electrician			.055
Control variables			
F	5.11***	6.78***	6.23***
Ajusted R2	.156	.258	.302
R2	.194	.303	.360
△R2		.109***	.057***

N=400, * P<0.05, ** P<0.01, *** P<0.001

Note: the model also includes 9 virtual variables constructed in unit 10 as the control variable and they are not listed in the above table for the sake of conciseness. The coefficients are all not standardized coefficients. △R2 is gained from the comparison between this model and the model before.

As shown in Table 6-27, the continuing commitment levels of rural electrician and labor worker are remarkably improved when the procedural justice level is high. The continuing commitment levels of personnel of collective ownership and the personnel in the system of ownership by the whole people are also improved but only to a small degree.

As shown in Figure 6-28, the continuing commitment level of labor workers is improved up to the maximum when the comprehensive salary is at high level, secondary to which is the rural electrician and those of personnel of collective ownerships and the personnel in system of ownership by the whole people are improved relevantly less.

As shown in Figure 6-29, the continuing commitment level of rural electrician is improved up to the maximum when information sharing is at high level, secondary to which is the rural electrician and that of the personnel in system of ownership by the whole people is improved much less. It should be noted that the continuing commitment level of personnel of collective ownership is reduced little instead when information sharing is at high level.

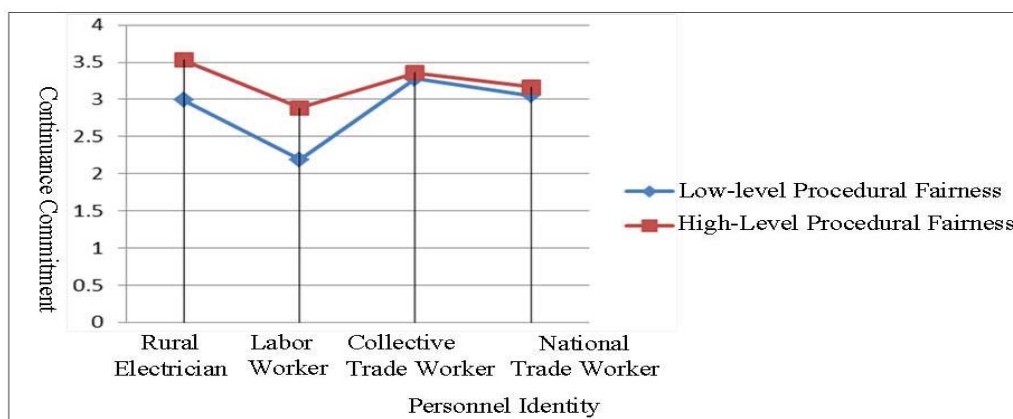


Figure 6- 27 Moderating effect on the Relationships between Personnel Identity and Continuance Commitments by Procedural Justice

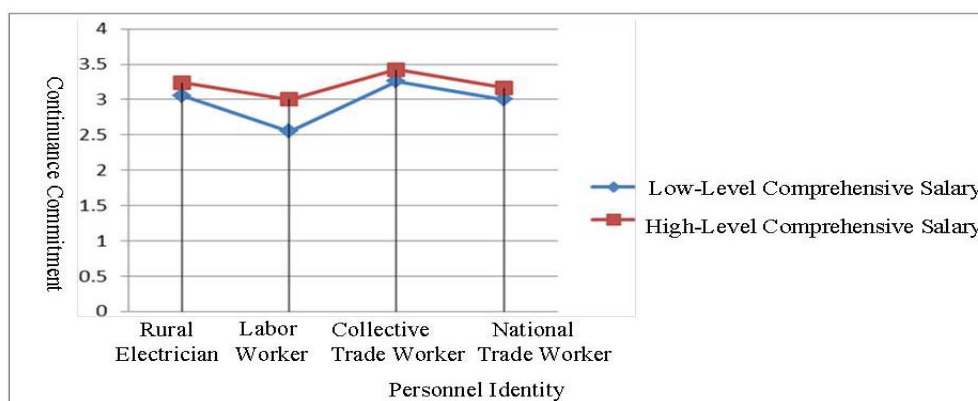


Figure 6- 28 Moderating Effect on the Relationships between Personnel Identity and Continuance Commitments by Comprehensive Salary

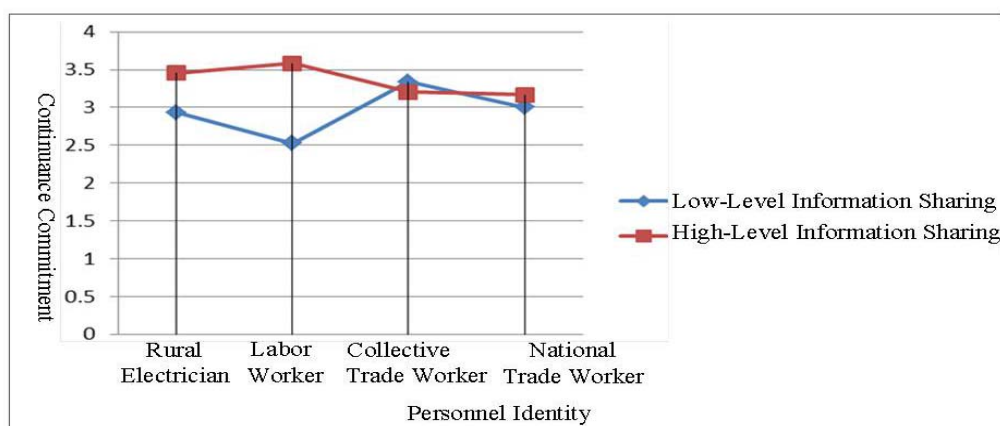


Figure 6- 29 Moderating Effect on the Relationships between Personnel Identity and Continuance Commitments by Information Sharing

6.3.6 Supplementary analysis

During the process of the aforementioned analysis, H7 is proposed based on the aforementioned hypotheses from H1a to H4b. If hypotheses from H1a to H4b have

emphasized the relationships among the employee identities and the various dimensions of organizational commitments, then H7 is to further explore whether there are influences from HPWP on the aforementioned relationships, which is also one of the themes of this article. The reason is that the major purpose of this article is to explore whether implementing HPWP system in the electric industry could affect the relationships between the identities of the employees and the level of organizational commitments.

The above process of analysis is liable to remind the readers: could the identity of employees produce effect of adjustment on the relationship between the systematical evaluation and organizational commitments of HPWP system? Due to the complicated relationships among the variables, it is totally possible that there will be distinctions among the relationships between the comments on efficient work and various dimensions of organizational commitments because of the different identities of employees. In this chapter relevant analysis will be conducted on this issue.

It could be seen from the returned results in Diagram 6-11 that the pseudo variables of three employees' identities and of HPWP systems could exert different effect on organizational commitments. In addition, Collective pseudo variables and the interactive variables of HPWP systems could exert significant negative effects ($P < 0.01$) on organizational commitments, rural pseudo variables and the interactive variables of HPWP systems could exert significant positive effects ($P < 0.05$) on organizational commitments, while the labor pseudo variables and the interactive variables of HPWP systems could exert rather insignificant effect ($P > 0.05$) on organizational commitments.

This indicates that there are significant distinctions existing in the relationships between comments of HPWP system and organizational commitments within the employees in enterprises owned by the whole people and in collective ones, so are in the employees in enterprises owned by the whole people and rural electricians. But this kind of relationship has no significant distinctions between the employees in enterprises owned by the whole people and labor workers. This result has supported the saying that "the identities of employees have adjusted the relationships between high-efficient work and organizational commitment" to some extent.

In terms of the relationships between the HPWP system and the various dimensions of organizational commitments,

The results in Table 6-12 has shown that as to emotional commitment the mere interactive function of fair procedures and collective pseudo variables could exert significant

negative effects ($P < 0.01$) on emotional commitments, which shows that there are significant distinctions in the relationships between fair procedures and emotional commitments within employees in collective enterprises and wholly-owned ones.

The results in Table 6-132 has shown that neither the various dimensions of the HPWP systems nor the interactive functions of the pseudo variables of identities could display significant effects ($P > 0.05$), which illustrates that there is no significant distinction in the relationships between the two within the employees in enterprises owned by the entire people and other three types of employees.

It could be seen from the results in Table 6-14 that the interactive function between information sharing and collective variables and labor pseudo variables could exert significant negative effect ($P < 0.01$) on continuous commitments, which illustrates that there are significant distinctions in the relationships between information sharing and continuous commitment within the employees in enterprises owned by the entire people as well as those in collective enterprises and labor workers.

It could be derived from summarizing the above results that the identity of the employees could exert some regulating effects on the HPWP system and organizational commitments, but this kind of effect could vary among different identities. This article does not aim to focus on researching how the identity of the employees could regulate the relationships between HPWP system and organizational commitments, so only brief introductions are conducted in the previous text.

6.4 Discussions

It can be seen the most of the hypotheses of which the inspection results are collected in Table 6-15 are supported by data. In this section will respectively discuss the hypotheses in the above paragraph.

6.4.1 Relationships between personnel identity and organizational commitments

The above paragraph hypothesizes H1a to H4b are mainly for the inspection of the relationships between recruitment characteristic & organizational commitments and its three dimensions. It hypothesizes the difference of personnel identity will impact on the difference of the organizational commitments of personnel and its three dimensions and simultaneously considers the levels of organizational commitments and its three dimensions reach the

maximum on the personnel in system of ownership by the whole people, secondary to which is personnel of collective ownership and then the labor worker and the rural electricians is at lowest.

The results of study indicate that the levels of organizational commitments, affective commitments, normative commitments and continuance commitments indeed represent remarkable differences among personnel identity. The root reason possibly lies in the fact that personnel identity is a long-standing institution and system and the existing managerial system cannot ensure “equal pay for equal work” (though the personnel in different personnel identity may differ in the type of work engaged) under multiple personnel identity. As different personnel identities have distinct characteristics, corresponding personnel have diverse feelings for the stability of labor relation, social identity etc. besides the great income gap among the personnel in different personnel identity.

It can be seen the levels of organizational commitments and its three dimensions do not change from high to low as the personnel characteristic changes from ownership by the whole people, collective ownership, labor worker and rural worker, instead they change in different dimensions.

The relationship between personnel identity and affective commitments is shown in Figure 6-9, in which it should be noted that the affective commitment level of rural electricians is quite high, only slightly lower than the personnel of ownership by the whole people. The probable reason lies in though the rural electricians is the group having the most unstable and lowest income in Power Administration, the identity of “personnel of Power Administration” will promote their social status for which this affective effect is rather important to rural electricians but this kind of affective effect is attached to one’s associated unit. Moreover, the personnel identity of government branch and traditional state-owned companies alike is featured with extremely high social identity value in the background of Chinese culture, especially the rural environment. From essence, this high level proceeds more from “self-interest” potentially and mainly affected by social mind. The high-level affective commitments of personnel of ownership by the whole people may be more from stable labor relation and the highest relative income as well as probable promotion expectation. Essentially speaking, this is out of “self-interest” but more specifically out of material interest.

The relationship between personnel identity and normative commitment level is shown in Figure 6-10. The change law of normative commitment level is more in line with

theoretical expectations, indicating the personnel of ownership by the whole people have the highest normative commitment level while the rural electricians have the lowest. By virtue of the emphasis of sense of responsibility and obligation for normative commitments, these primarily depend on the moral guide and pressure of the personnel themselves. When the remarkable difference of educational level is considered for the personnel in different identity, it is not difficult to understand the relationship between personnel identity and normative commitments.

As shown in Figure 6-30, the personnel of ownership by the whole people have the highest educational level, secondary to which is the labor worker and then is the personnel of collective ownership. The rural electricians own the lowest average educational level. The change law is basically consistent with the law shown in Figure 6-10.



Figure 6- 30 The Relationship between Personnel Identity and Educational Average Level

The relationship between personnel identity and continuance commitments is shown in Figure 6-11. The personnel of collective ownership and rural electricians have relatively high average level of continuance commitments while the rural workers have the lowest and that of the personnel of ownership by the whole people have the second lowest. The responsibility of managing the labor workers is usually on labor export companies therefore they depend much less on the existing power supply company, which can explain their low continuance commitment level. The above changes can be seen from Figure 6-11, at the same time it should be noted even though the personnel of collective ownership have the highest continuance commitment average level, their levels just fluctuate around the average line, which proves the personnel groups in different identity unremarkably differ in continuance commitment level. It can be seen from Table 6-19 that the difference caused by personnel identity is only about 13% of the total amount of variation, possibly including many other factors like income and educational levels. For example, the personnel (usually of the ownership by the whole people) who own high educational level and powerful ability may consider resignation out of various reasons (like unsatisfying income and going out for

business). Especially when the income gap between the coastal area and innerland enlarges and the income of people going out for business is higher and higher, the capable will reevaluate their capabilities and incomes based on the theory of expectancy and when they realize the people whose capabilities are much worse gain much more income, they will generate such strong sense of inequity that wavers their continuing stay in their existing unit, thus making their continuance commitment level reduced.

6.4.2 Relationship between HPWP system and Organizational Commitments

Hypothesis H5 and the underlying hypothesis consider HPWP system is positively correlated with the organizational commitments and the various dimensions of HPWP system are positively correlated with the affective commitments, normative commitments and continuance commitments. These hypotheses are preferably supported. HPWP system is aimed at mobilizing the enthusiasm of personnel and improving their work efficiency to ultimately promote company performance. If companies take measures (procedural justice, comprehensive salary, information sharing etc.) to get all personnel participated in, provide equal reward to personnel and help personnel learn about relevant information utmost (for increasing their sense of mastery), the personnel will undoubtedly improve their organizational commitment (three dimensions) level when they realistically learn the effects of these measures because the personnel will generate stronger sense of participation, justice and safety compared with yesterday which are all important cause variables to organizational commitments.

6.4.3 Relationship between Implementing HPWP system and Organizational Commitments

Hypothesis H6 and its underlying hypothesis consider the implement of HPWP system will stimulate the organizational commitments (including its three dimensions) of the personnel in various identities to a relatively higher level.

The analysis in Section 6.3.3 indicates that generally the organizational commitment level of the personnel in the units having implemented HPWP system is much higher than those not having implemented and also the affective commitment level and continuance level are remarkably higher. Though the normative commitments differ indistinctively between two groups, the average level for the units having implemented HPWP system is relatively higher. The results indicated that the units having implemented HPWP system indeed practically take

powerful measures, influencing the perception and attitude of interior employees. However, the comparison between this result and the result of variance analysis conducted as the characteristic of personnel identity in Section 6.3.4 reveals an extremely important problem: the analysis of the data set for the personnel of ownership by the whole people and the data set for labor worker indicates the influence by implementing HPWP system is generally consistent with the above stated influence and implementing HPWP system is positively directed on organizational commitments and its various dimensions. In the analysis on the data set for the personnel of collective ownership, the continuance commitment level of this kind of personnel is reducing for the units having implemented HPWP system but not significant (above 0.1). In the analysis on the data set for rural electricians, the affective commitment and continuance commitment levels for the units having implemented HPWP system have no remarkable difference with the units having not implemented but the normative commitments is distinctly reduced ($P < 0.05$).

This special result arouses the interest of researchers and the analysis considers corresponding units which have implemented HPWP system fail to realize justice during the formulation of relevant system, especially during the implement, reflected in the ignorance of the actual needs of rural electricians. To verify the accuracy of this analysis, the author has conducted further investigation to the units having implemented HPWP system and the conclusion is consistent with the analysis result.

6.4.4 Moderating effect of HPWP system

Hypothesis H7 and its underlying hypothesis consider that the evaluation to HPWP system in their associated units functions moderating effect on the relationship between personnel identity and organizational commitments and the analysis results support these hypotheses. If the personnel highly evaluate the HPWP system implementing, it means they think the companies treat them more impartial and their labor may fairly recognized and be rewarded, in the meantime the more they learn about company-associated information the more sense of master will they gather, so their psychological sense of safety will be strengthened.

These results indicate that it is necessary to implement HPWP system in power supply companies, especially under the condition of current personnel identity being unable to be simply uniformed. For the power supply companies, as many rural electricians are fighting at the front-line, their work attitude and work results are tightly attached to the feelings of users,

influencing the fame and development of companies. The analysis indicates that good implement of HPWP system can greatly increase the organizational commitment level of rural electricians, which is benefit to long-term development of companies.

Table 6- 15 Collection of the Results of Hypothesis Testing

Hypothesis	Relevant analysis	Variation analysis	Regression analysis
H1a: Different identities of the employees result in different levels of organizational commitments in various dimensions.		Support	Support
H1b: Among the levels of various dimensions of organizational commitments that of the employees in enterprises under the ownership by the whole people is the highest one, compared to which that of those in collective enterprises is slightly lower, while for labor workers it is even lower and it reaches its minimum level for rural electricians.		Partially support	Support
H2a: the personnel identity differs, the affective commitments differ.		Support	Support
H2b: the affective commitments are the highest for the personnel of ownership by the whole people. Compared with them, those of the collective workers are slightly lower, those of labor workers are much lower and the rural electricians have the lowest.		Partially support	Partially support
H3a: the personnel identity differs, the normative commitments differ.		Support	Support
H3b: the normative commitments are the highest for the personnel of ownership by the whole people. Compared with them, those of the collective workers are slightly lower, those of labor workers are much lower and the rural electricians have the lowest.		Partially support	Partially support
H4a: the personnel identity differs, the continuance commitments differ.		Support	Partially support
H4b: the continuance commitments are the highest for the personnel of ownership by the whole people. Compared with them, those of the collective workers are slightly lower, those of labor workers are much lower and the rural electricians have the lowest.		Nonsupport	Nonsupport
H5: HPWP system is positively correlated with various dimensions of organizational commitments.	Support		Support
H5a: various dimensions of HPWP system are positively correlated with affective commitments.	Support		Support
H5b: various dimensions of HPWP system are positively correlated with normative commitments.	Support		Partially support
H5c: various dimensions of HPWP system are positively correlated with continuance commitments.	Partially support		Partially support
H6: employees display rather consistently higher levels on various dimensions of organizational commitments where HPWP system is implemented.		Support	

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H6a: due to the implement of HPWP system, the affective commitment level is relatively high for the personnel in all the personnel identities.		Partially support	
H6b: due to the implement of HPWP system, the normative commitment level is relatively high for the personnel in all the personnel identities.		Partially support	
H6c: due to the implement of HPWP system, the continuance commitment level is relatively high for the personnel in all the personnel identities.		Partially support	
H7: Evaluations of employees on HPWP system play a role of positive adjustment between the identity of employees and the various dimensions of organizational commitments.			Support
H7a: the evaluation from the personnel to various dimensions of HPWP system functions moderating effect on the relationship between personnel identity and affective commitments.			Support
H7b: the evaluation from the personnel to various dimensions of HPWP system functions moderating effect on the relationship between personnel identity and normative commitments.			Support
H7c: the evaluation from the personnel to various dimensions of HPWP system functions moderating effect on the relationship between personnel identity and continuance commitments.			Support

Table 6- 16 Collection of the Results of Hypothesis Testing

Hypothesis	Correlation analysis	Variation analysis	Regression analysis
H1a: the personnel identity differs, the organizational commitment level differs.		Support	Support
H1b: the organizational commitments are the highest for the personnel of ownership by the whole people. Compared with them, those of the collective workers are slightly lower, those of labor workers are much lower and the rural electricians have the lowest.		Partially support	Support
H2a: the personnel identity differs, the affective commitments differ.		Support	Support
H2b: the affective commitments are the highest for the personnel of ownership by the whole people. Compared with them, those of the collective workers are slightly lower, those of labor workers are much lower and the rural electricians have the lowest.		Partially support	Partially support
H3a: the personnel identity differs, the normative commitments differ.		Support	Support
H3b: the normative commitments are the highest for the personnel of ownership by the whole people. Compared with them, those of the collective workers are slightly lower, those of labor workers are much lower and the rural electricians have the lowest.		Partially support	Partially support
H4a: the personnel identity differs, the continuance commitments differ.		Support	Partially support
H4b: the continuance commitments are the highest for the personnel of ownership by the whole people. Compared with them, those of the collective workers are slightly lower, those of labor workers are much lower and the rural electricians have the lowest.		Nonsupport	Nonsupport
H5: HPWP system is positively correlated with organizational commitments.	Support		Support
H5a: various dimensions of HPWP system are positively correlated with affective commitments.	Support		Support
H5b: various dimensions of HPWP system are positively correlated with normative commitments.	Support		Partially support
H5c: various dimensions of HPWP system are positively correlated with continuance commitments.	Partially support		Partially support
H6: In the units having implementing HPWP system, the organizational commitment level is relatively high for the personnel in all the personnel identities.		Support	

H6a: due to the implement of HPWP system, the affective commitment level is relatively high for the personnel in all the personnel identities.		Partially support	
H6b: due to the implement of HPWP system, the normative commitment level is relatively high for the personnel in all the personnel identities.		Partially support	
H6c: due to the implement of HPWP system, the continuance commitment level is relatively high for the personnel in all the personnel identities.		Partially support	
H7: the evaluation from the personnel to HPWP system functions positive-going moderating effect on the relationship between personnel identity and organizational commitments.			Support
H7a: the evaluation from the personnel to various dimensions of HPWP system functions moderating effect on the relationship between personnel identity and affective commitments.			Support
H7b: the evaluation from the personnel to various dimensions of HPWP system functions moderating effect on the relationship between personnel identity and normative commitments.			Support
H7c: the evaluation from the personnel to various dimensions of HPWP system functions moderating effect on the relationship between personnel identity and continuance commitments.			Support

Chapter 7: Research Conclusions

7.1 Major Conclusions

This paper explores the relationship between the various personnel identities and organizational commitments, and verified the important moderating function of the High Performance Working Practice system on the relationship between personnel identity and organizational commitments. Main conclusions are as followings:

(1) Personnel identity(workers in enterprises owned by the whole people, workers enterprises of collective ownership, labor workers, rural electricians) have very important influence on personnel' organizational commitments. Workers in enterprises owned by the whole people have highest level of organizational commitment, while rural electricians' are the lowest. To further divide organizational commitment into three dimensions: affective commitment, normative commitment and continuance commitment. Results of studies indicate that: affective commitment, normative commitment and continuance commitment show significant difference in personnel identity. Workers in enterprises owned by the whole people have the highest level of affective commitment and normative commitment, and level of their continuance commitment are slightly lower than others; workers in enterprises of collective ownership have terrific continuance commitment while their affective commitment and normative commitment are slightly lower than others; labor workers' continuance commitment and normative commitment is lower; rural electricians' affective commitments are higher than workers in enterprises of collective ownership and labor workers, but level of their normative commitment are the lowest.

(2) HPWP system shows positive relationship with organizational commitment and the three dimensions. If enterprises provide fair management procedures, reasonable and comprehensive salary system as well as opening relevant information, which strengthen personnel' feeling of participation, their sense of participation, justice and safety will be apparently promoted, and their organizational commitment will be promoted. By conducting contrastive analysis upon enterprises taking or not taking implementation of HPWP system, it is found that organizational commitment level of personnel in enterprises implemented HPWP system is much higher than personnel in enterprises without such system. Personnel' affective

commitment and continuance commitment is significantly higher in enterprises implemented HPWP system. However, normative commitment shows no obvious difference in enterprises applied with HPWP system and enterprises not applied with HPWP system.

(3) Personnel' evaluation on HPWP system in their unit has very important moderating effect on relationship between personnel identity and their organizational commitment. Personnel tend to believe that enterprises treat them in a more fair way, their salary system is more reasonable, and learning more information about their enterprises gives them stronger sense of participation and ownership in the mean time. All these senses are helpful for promoting level of personnel's organization commitment. On the contrary, personnel show lower organizational commitment level when their evaluation about HPWP system turns to be negative.

7.2 Research Innovation

This paper starts with an actual issue, and urge to reach the balance between theoretical innovation and practical application as much as possible by integrating with existing references. Integrating with researches and finds above, this paper mainly contains innovations in these two respects:

In present China, employment form is diversified, the marketized employment form with employment body diversified tends to be the stream of enterprises' employment. Basing on existing research literature about organizational commitment, this paper mainly focuses on studying how do personnel' different identities affect their organizational commitment. On one hand, the research enriches existing researches on factors affecting organizational commitment from the aspect of empirical experience; on the other hand, it provides valuable experience for enterprises managing personnel with different identities.

Western scholars have conducted plenty of empirical researches on relationship between the HPWP system and organizational performance. There are more and more proofs proving that human resource application in the HPWP system has positive influence on organizational performance and return of financial investment. Furthermore, many domestic and foreign researches prove that organizational commitment has a close relationship with organizational performance. However, these researches barely study on the HPWP system together with organizational commitment. Researches in this paper have proved that the HPWP system have important moderating effect on personnel identity and their organizational identification. It is

easier to promote personnel' organizational commitments when they sense more human resource application of the HPWP system. This paper has theoretically enriched researches on HPWP system and organizational commitment.

7.3 Deficiencies and Outlook

Though there are some valuable conclusions in this paper, there still exist some limitation and deficiencies in this research because of my researching capacity and objective conditions, which needs to be overcome and completed in following researches.

First of all, though the research selects 10 prefecture power company of provincial grid company of B province of A group, I still applied some casual sampling methods and did not perform national multi-industry research because of limitation on research cost, time and capacity, which to a certain extent affects samplings' external validity and general applicability. Meanwhile, though amount of valid samples that earned at the end of research meets requirements of empirical analysis, it is not an actual large sample research, and it can not completely explain all kinds of actual conditions. Besides, among samples we selected, units implementing the HPWP system is less than units not implementing the HPWP system (2 VS 8), research on the HPWP system did not last for too long and there may exist some other functions that have not been found. Moreover, personnel' evaluation on the HPWP system is subjective, which contains some subjectivity. Following researches will perform large sample research on other industries and regions, in order to further prove or expand frame of our research.

Second, this research have proposed the theoretical frame about relationship between the HPWP system moderating personnel' identity and organizational commitments on the basis of integrating researches on organizational commitments and the HPWP system. Since researches on HPWP system are mostly done by foreign countries, similar domestic researches is much more fewer, and our understanding about moderating effect of HPWP system is not clear, our research is just a preliminary try, imperfection may exists in the module, and requires to be completed in the future. Besides, scholars have not been firmly defined about content composition of HPWP system yet, thus this paper have only selected effects of three aspects of the HPWP system: procedural justice, comprehensive salary and information sharing, and did not take other factors into consideration(such as incentive system, working arrangement, training and development, etc.) Based on situation of domestic

enterprises' practices of the HPWP system, following researches can propose more reasonable content composition of HPWP system.

7.4 Suggestions on Practice

These findings have very good practical value and consistent with the practice, as we experiencing when take some change in human resources management according to the HPWP:

Firstly, change the identity management to achieve equal pay for equal work, resolve labor employment risk of major industries and meet provisions and requirements related to national laws and regulations. Incorporate outsourcing workers and long-term workers of major industrial posts to the same post and salary system. Secondly, the power administration can pay undivided attention to urban and rural power supply and first-rate service; quality of safety production and marketing service is improved significantly and the quality of equipment maintenance is improved significantly, competition of personnel skills is impressive and the safety assurance system is perfected and enhanced effectively. Third, extend chain of position sequence and increase income gap of personnel, expand development channel of personnel, strengthen pressure of post competition for personnel, and fully motivate and mobilize the working enthusiasm and positivity of personnel as well. 8 post levels have been provided for first line of production after reform and pay more attention for payroll distribution to key position, excellent talents, and personnel with outstanding working performance in first line of production, which aggravates the income gap among personnel with different working performance and different devotions in enterprises, so the pressure of post competition is obviously increased. Fifth, build up and complete competitive mechanism of all personnel in enterprise, make competition for post become a regular practice, a long-term and systematical work. Realize dynamics and flow of personnel by post competition, fully motivate and mobilize working enthusiasm and positivity of personnel. In addition, implement job performance-based payment system of "confirm level by post, several salary-level for one post, fluctuate point value and change salary by review", pay more attention to performance and devotions to the enterprise to expand salary increasing and development channel of personnel and fully reflect salary incentives. lastly, centralized technical skills and training advantages are obvious and realize integration and share of resources. The concentrated training and professional technology and skills learning arranged

by disciplines center are more convenient. The discipline center widely develops various technical skill training and comparison according to professional needs and practical post work, the personnel are required to complete learning contents within limited time quantitatively and strengthen application of performance assessment, which fully motivates potentials of personnel and improves technical skill level quickly. Therefore, the professional focused technical advantages are very obvious; at the same time, the common language and communication of personnel in different disciplines are more frequent and abundant.

As reform on domestic power enterprises is making progress, management on personnel with various identities is an important issue in the process of reform. This paper indicates that it is critical for power enterprises to implement HPWP system, especially the present personnel identities can not be simply uniformed in short term, personnel' organizational commitments can be significantly promoted if the HPWP system can be well implemented, which is good for enterprises' long-term development. According to conclusions earned above and integrating with factors affecting organizational commitments, some suggestions for management of power supply enterprise can be proposed as following which expected to improve level of power supply enterprises' personnel' organizational commitments and thus will promote work performance of enterprises' personnel.

(1) Labor employment management strategies. Firstly, strengthen planned management on human resource. Strictly implement regulations of personnel entering management, strengthen control on each kinds of employment and verification on information of personnel transformed from organized system to unit system, rigorously control newly hired personnel, in order to ensure quality of newly hired personnel. Secondly, make innovations in management on employment module for rural electricians. Implement reform on entrusting module for rural electrician industry, accelerate transformation of employment form for rural electrician, and develop uniformed and standardized management system for rural electricians, in order to realize specialized, standardized and intensified management. Thirdly, standardize employment management on labor dispatching. Standardize labor dispatching institutions in compliance with law, strengthen planned management on labor dispatching employment, control total amount of dispatched labors, specify range of positions for labor dispatching , in order to efficiently solve position crossing issues and avoid employment risks. Moreover, business entrusting of positions in the main industry shall also be carried on. In the condition of guaranteeing safety of production and quality of service, carry on business entrusting work, gradually realize methodical transformation from employment of labor dispatching for main

industry to business entrusting, and motivate continuous increasing of labor efficiency. Last, strengthen management on personnel relationship. Conduct engagement survey, develop personnel relationship improving plan, taking targeted methods in order to promote personnel' overall recognition, further strengthen assessment and supervision on management of labor contracts and corresponding implementation, to develop peace and stable labor relationship.

(2) Human resource guaranteeing mechanism and strategy. Firstly, propose human resource personnel developing plan for power supply enterprises after scientific consideration in accordance with present human resource situation and development strategy of power supply enterprises, to develop personnel in short supply, outstanding personnel and back-up personnel, in order to realize promotion on power supply enterprises' capacity of human resource preservation, human resource risk prevention and human resource input-output. Secondly, practice intelligent development plan comprehensively and in order. Emphasize on cooperation and coordination between different specializations and organizations of power supply enterprises, develop uniformed information sharing platform, analyze problems reasonably, plan overall, and ensure balance of various human resource coordination. Thirdly, focus on capability of implementation and actual performance of works. Strengthen on-progress control, seize timing, finish implementation of works, and optimize mechanism of organizations, measurements, supervision, motivation, propaganda and guarantee.

(3) Salary management strategy. Firstly, strengthen income distribution management. Consummate budget management for gross pay and annual salary calculation methods for charge officers of enterprises, standardize employee benefit guarantee management, strengthen supervision and approval on income distribution of different units, and standardize projects, resources and distribution rules of salaries. Secondly, carry on reform on position performance salary system. Specify basic salary system for power supply enterprises, uniform salary structure and salary standard, complete salary distribution system which closely links to performance assessment, position responsibility and quality. Thirdly, systematize internal income distribution relationship of power supply enterprises. Uphold principles including "performance first", take reasonable favor for high-class personnel, key positions, relevant positions for production, and personnel in tough areas into consideration in distribution, Implement regulation and method of control on both gross salary and salary level. Last, deepen implementation of quantitative assessment. Optimize performance management and indicator system, innovate assessment methods, apply target management systematically, spread PDCA working method comprehensively, develop diversified performance assessing

module for different units, specialty, region. Deepen implementation of performance manager system, strengthen supervision on processes of performance assessment, develop weak spot pre-warning system, promote pertinence and lead function of performance assessment.

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Appendix: Questionnaire

Human Resource Management Questionnaire¹

Please answer the questionnaire carefully. Thanks for your support and participation.

Description:

1. Please choose the answer based on your own experience. There is no standard answer in each question, and it isn't taken as any evaluation reference.
2. The investigation won't have any effect on you, such as your current position and income, etc.
3. If you have any question, please feel free to contact us _____ Tel: _____

Part One Multiple Choice

1. The company you work in (hereinafter referred to as the company) will adopt the deep and various recruitment methods when it recruits the new employees. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
2. The company always does the investigation about employees' attitudes in order to identify and adjust their morale. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
3. The employees' performance feedback of the company comes from various channels. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
4. The promotion of the employees in the company is mainly based on their performance not on their seniority. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

¹ This is the official questionnaire through revising the data analysis of pre-survey.

5. The rewards part in the company is paid based on the whole team's performance. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
6. The deep and specialized skill trainings are conducted in the company. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
7. The cross-training programs with multi-position or multi-skill is always conducted, or the employees can always be involved in various tasks. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
8. The company conducts general skill trainings. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
9. The company provides the employees with the information on the company's financial situation. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
10. The company provides the employees with the information on the company's operation situation. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
11. The company provides the employees with the information on the company's strategic decisions. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
12. The company always provides the employees with their working performance evaluation. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
13. The company always provides the employees with their working performance feedback. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant
14. The employees have the channels of expressing their complaints in the company. ()
1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively

accordant 5 Accordant

15. To me, working in this company is better than working in any other company. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

16. I am willing to make more efforts to help the company to achieve the success. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

17. I am very glad to be arranged to work in this company. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

18. I am very proud to tell others that I work in this company. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

19. I work very hard in the current company because I have the affection to the company. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

20. I have the strong sense of belonging in the current company. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

21. I think that I have the obligation to work in this company. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

22. During the work, I think my opinion has been highly concerned. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

23. During the work, I have the chance to deal with things by means of my own ways. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

24. I should be loyal to my current company. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

25. Job-hopping to another company is an immoral behavior. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively

accordant 5 Accordant

26. In order to go on working in this company, I am willing to accept any job. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

27. If I had another proper working opportunity, I would truly feel sorrow to leave the current company. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

28. The significant decisions of the company on employees should be understood. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

29. I find that my value system is in harmony with the value system of the company. ()

1 Not accordant 2 Comparatively not accordant 3 Not certain 4 Comparatively accordant 5 Accordant

30. I feel satisfied with the current ways of implementation policy of the company. ()

1 Absolutely disagree 2 Strongly disagree 3 Disagree 4 Agree 5 Strong agree

31. I feel satisfied with the ways of the superiors' decision-making. ()

1 Absolutely disagree 2 Strongly disagree 3 Disagree 4 Agree 5 Strong agree

Part Two Blank Filling

1. Gender _____ Age _____

2. Your current working company is _____ electric power bureau (company).

3. The nature of your current position is ()

A. Administrative position B. Professional skill position C. Manufacturing position

4. Your length of service in your company is _____ years.

5. Your current working status is the _____

A. Employee of ownership by the entire B. Contract employee

C. Contract rural electrician D. Employee of collectively-owned company

6. Your highest degree of education is _____

A. Junior high school or below B. Senior high school/technical secondary school

C. Junior college D. Bachelor E. Master or above

The questionnaire is finished, and thanks for your answer. Please check your answer again, and **don't miss any question**, because your opinion is very valuable to us. Thanks again for your support and cooperation!

If you have any interest in our research, you are highly welcomed to contact us. Thanks!