



**THE IMPACT OF JOB SATISFACTION ON EMPLOYEES'  
ORGANIZATIONAL COMMITMENT IN  
STATE-OWNED ENTERPRISES**

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**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF  
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This Independent Study has been Approved as a Partial Fulfillment of the  
Requirement of International Master of Business Administration in International  
Business Management

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## Abstract

With the rapid development of China's economy after the reform and opening up, the competitiveness among various enterprises has gradually shifted to the competition for human resources, and the physical and mental health development and practical needs of individual employees have attracted the great attention of scholars from all international parties, and the individual employee's behaviors, attitudes, and identification with the organization, i.e., the level of organizational commitment, have a great impact on the enterprise's economic performance and stable development. The purpose of this study is threefold: (1) To test whether there is a significant difference between the personal traits of the respondents in terms of job satisfaction and organizational commitment. (2) To test whether respondents' job satisfaction has a significant positive effect on organizational commitment and its dimensions (3) To test whether respondents' job satisfaction is predictive of organizational commitment.

In this study, a quantitative research method was used to distribute and collect data through questionnaires from 406 employees from 19 state-owned enterprises in Shanxi Province, China. Descriptive statistics, independent samples t-test, one-way ANOVA, correlation analysis, and regression analysis were used to verify the research hypotheses of this paper using SPSS27 data analysis software on the 406 valid data collected.

The results of the study show that (1) in the survey and analysis of state-owned enterprise employees, it is found that there is no significant difference in the perceived level of job satisfaction and organizational commitment of state-owned enterprise employees in terms of different demographic characteristics such as gender, age, education, and years of working experience. (2) There is a positive correlation between job satisfaction and organizational commitment of employees in Chinese state-owned

enterprises, which can indicate that the greater the degree of job satisfaction of employees with their organizations, the more pronounced the organizational commitment will be and the higher their performance level will be. (3) Employees' job satisfaction in state-owned enterprises positively predicts their organizational commitment. Finally, based on the results of this paper, practical and effective improvement measures are proposed, which in turn cultivate the subjective initiative of employees and improve the good organizational commitment of state-owned enterprise employees.

**Keywords:** job satisfaction, organizational commitment, State-owned enterprises, human resource management

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After more than two months of hard work, I finally finished writing my thesis. From the beginning of the thesis topic selection to the implementation of the system, and then to the completion of the thesis article, each step was a new trial and challenge for me, and this is the biggest project I have completed independently during my college years. During this time, I learned a lot and felt a lot. From knowing nothing, I started to study and experiment independently, checking related materials and books, making the fuzzy concepts in my mind clear gradually, and making my very young work perfect step by step, each improvement is the gain of my study, and the success of each experiment will make me excited for a good period of time.

My thesis work is not very mature, and there are still many shortcomings. But this experience of doing a thesis has benefited me for life. I feel that doing a dissertation is a thing to be done with real heart and soul, a real process of learning and researching by oneself, without learning there can be no research potential, without one's own research, there will be no breakthrough, and then it will not be called a dissertation. I expect that this experience will inspire me to continue to improve in my future studies.

Finally, I would like to thank my thesis reviewers for their hard work. I would like to thank my family, friends, and classmates for their encouragement and support in completing this dissertation.

GUO ZISHAN

## Declaration

*I, GUO ZISHAN, hereby certify that the work embodied in this independent study entitled 'The Impact of Job Satisfaction on Employees' Organizational Commitment in State-owned enterprises' is result of original research and has not been submitted for a higher degree to any other university or institution.*

*Guo Zi Shan*  
.....  
(GUO ZISHAN)  
January 9, 2023

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# Chapter 1 Introduction

## 1.1 Overview of the Study

Zhang and Wang (2021) point out that Chinese State-owned enterprises play a pillar role in the construction of the socialist economy with Chinese characteristics, and the reform and development of Chinese State-owned enterprises have always been a core component of the overall economic system. Therefore, deepening the reform of State-owned enterprises is an inevitable requirement to promote the rapid development of China's economy. Wei (2016) Since the implementation of reform and opening up in China, State-owned enterprises have undergone different stages of development and change, making them constantly adapt to and integrate with the development of the market economy model. Some of the developments of State-owned enterprises have been based on creative changes. According to Cheng (2013), the reform and development of enterprises in an environment of highspeed competition contributes to the improvement of total social welfare, and vice versa. However, due to many factors such as the specificity of their own particular system, in the process of State-owned enterprises reform, especially in the face of an increasingly competitive market environment and even the dynamic environment of the international market, the huge challenge of rapid upgrading and transformation and how to improve their core competitive advantages have become the focus of State-owned enterprises' attention. In this process, Chinese State-owned enterprises are not only facing the reform of economic system, but also facing many problems in the transformation of human resource management in public sector. In the process of transformation, companies are gradually realizing that employee satisfaction with the organization and the work they do largely affects the performance and overall development of the company, and that how to retain and effectively leverage talent is directly related to the future development of the company. One of the issues that cannot be ignored is how to effectively manage employees within the company, and how to improve their job satisfaction, sense of belonging, organizational identity, and employees' motivation is an urgent issue to be solved in the transformation process of human resource management in the public sector, which is also the cornerstone to ensure the long-term and stable development of the company.

In this paper, we have collected and organized a large amount of literature on the research results related to employee job satisfaction and organizational commitment from various international scholars. As a result, the differences in the research on job satisfaction and organizational commitment can be summarized as the differences in the research results from different research perspectives, different contexts, different populations, different time and place, and different theories. For the research on job

satisfaction and organizational commitment in the Chinese cultural context, there are few empirical studies and lack of relevant theories as a basis (Liu, 2014).

Therefore, this paper takes the review and summary of international scholars' research on job satisfaction and organizational commitment as the theoretical basis, and combines the characteristics of Chinese State-owned enterprises themselves, the characteristics of employees, and the current management situation and other factors. This paper proposes to further explore the perspective of job satisfaction on organizational commitment of employees in State-owned enterprises. The paper proposes rationalized suggestions for improving the job satisfaction and loyalty of employees in Chinese State-owned enterprises, as well as stimulating the sense of belonging and personal initiative of employees within State-owned enterprises, and improving the market competitiveness of Chinese State-owned enterprises.

## **1.2 Problems of the Study**

Scholars at home and abroad have achieved fruitful results in the past few decades on the study of employees' job satisfaction and organizational commitment, among which the research on the relationship or influence between the two has been mainly focused on private enterprises, but the relationship between the two has rarely been explored from the starting point of employees in state-owned enterprises. This paper explores the relationship between job satisfaction and organizational commitment from the perspective of employees in state-owned enterprises, based on the research results and research methods of previous scholars. It aims to provide rational suggestions and theoretical guidance for human resource management in enterprises, further enrich the literature on the relationship between job satisfaction and organizational commitment, and expand the applicability of the two in the context.

## **1.3 Research Questions**

1. Are there significant differences in job satisfaction and organizational commitment among respondents' personal traits?
2. Is there a significant positive effect of job satisfaction on organizational commitment and its dimensions among employees of state-owned enterprises?
3. Whether job satisfaction of employees of state-owned enterprises has a positive predictive effect on organizational commitment?

## **1.4 Objectives of the Study**

1. To test whether there is a significant difference between respondents' job satisfaction and organizational commitment on demographic variables.

2. To test whether respondents' job satisfaction has a significant positive effect on organizational commitment and its dimensions.

3. To test whether there is a significant positive correlation between the two variables of job satisfaction and organizational commitment of employees in state-owned companies.

## **1.5 Significant of the Study**

For many years, job satisfaction and organizational commitment have been the focus of academic and business circles, and scholars from all over the world have conducted in-depth research and explored the two respectively and achieved a lot of research results, both on individual variables and on the relationship between them (Saputra & Mahaputra, 2022). There is a considerable lack of inquiry and research results on job satisfaction and organizational commitment of employees in the Chinese state-owned system, and this is more related to the many problems of public human resource management issues in Chinese State-owned enterprises that need to be solved. Through an empirical study of 389 respondents in 25 enterprises, Li (2018) found that job satisfaction has a positive predictive effect on employees' normative commitment, sustaining the commitment, and affective commitment, and good job satisfaction of employees can effectively promote employees' work motivation and loyalty to the company. Therefore, in order to thoroughly improve the motivation and loyalty of employees in State-owned enterprises, it is necessary to take appropriate management measures to improve individual employees' job satisfaction and organizational commitment, so as to strengthen the close relationship between the enterprise and individual employees, and then effectively improve the sense of belonging of the employees (Yu, 2022).

For the present study sample, M State-owned enterprises are facing an increasingly serious phenomenon of employees' work slackness, decreasing loyalty, recognition, and participation in organizational activities in the course of their operations. In a study by Zhang (2016) based on employee turnover in State-owned enterprises, it was found that State-owned enterprises face a long-term decline in employee motivation and employee turnover, and an important factor that cannot be ignored is the internal management of personnel in the enterprise, and due to the special nature of the Chinese State-owned enterprises system, State-owned enterprises are the pillars of national economic development, and the employees of the enterprise are valuable assets that drive the

development and progress of the enterprise. In order to give full play to the initiative and creativity of employees as much as possible, and to tap the potential motivation of employees so that they can actively create more benefits for the development of the organization, it is necessary to pay attention to the commitment of employees to the organization (Li, 2018).

To summarize, this paper is based on the perspective of employees in Chinese State-owned enterprises, on the one hand, by collating and analyzing the literature on the current status of research on employee job satisfaction and organizational commitment, and the influencing factors. It provides theoretical references for subsequent managers on how to effectively manage the enterprises and proposes corresponding management measures on this issue. On the other hand, as far as the employees are concerned, the in-depth study of organizational commitment is an important way to solve the internal talent management, ensure the stability of employees within the enterprise, improve their motivation and creativity, and likewise enhance their overall happiness.

## **1.6 Limitation of the Study**

In the process of this paper, a mature scale was used, and the object of the study was only for the employees of State-owned enterprises in Shanxi M, China. Due to the limitations of the sample size and the scope of the survey and the limitations of personal ability, economic conditions, and knowledge level, there were some limitations in the process of selecting the sample and collecting the questionnaire for the study.

Employees from State-owned enterprises in Shanxi Province, China, were selected as the study population for this sample, and the questionnaire was distributed on the Internet in the form of a questionnaire star. Considering that the research subjects were mainly selected from the employees in State-owned enterprises, they may be affected by their gender, age, and working years, and the generalizability of their results needs to be further explored. Secondly, in the process of filling out the questionnaire, as different subjects are affected by subjective emotions or actual feelings and thus understand the contents of the questionnaire differently, the authenticity and completeness of their answers may have certain deviations, resulting in the generalizability of the results of this study to be further tested. Therefore, it is suggested that the inclusion of interviews or other forms would be more convincing if conditions permit.

Finally, considering that the results of the measurements taken at different points in time for employees will vary over time. Therefore, the questionnaire data collected in this study are only cross-sectional data at a certain point in time, and no further observation of the dynamic data situation over a period of time is taken for the study



participants so that the dynamic relationship between the variables to be studied cannot be examined (Song, 2021).

## **Chapter 2 Literatures Review**

### **2.1 Introduction**

This chapter focuses on the review of the literature on job satisfaction and organizational commitment, firstly, the similarities and differences between the definitions of job satisfaction and the influencing factors of antecedent and consequence variables. The definitions of organizational commitment and the influencing factors of antecedent and consequence variables are reviewed and summarized. Secondly, the research results on the relationship between job satisfaction and organizational commitment in the literature are reviewed. Finally, the research methodology is reviewed and the conceptual framework of this paper is constructed based on the above combined with relevant theories.

### **2.2 Literature review**

#### **2.2.1 Literature review of job satisfaction**

Job satisfaction is an attitudinal attitude of an individual toward the job he or she is doing (Robbins, 1997). The first response of employees with low job satisfaction to treat this dissatisfaction is to try to change the conditions under which it arises, i.e., employee behavior change. Based on the perspective of research in the fields of human resource management and organizational behavior, employee job satisfaction is not only closely related to the actual work of the company but also plays an important decisive role in the sustainability of the organization and talent management. Employees' job satisfaction has always been highly concerned by scholars in both academic and business circles. Therefore, the definition of job satisfaction varies according to the scholars' research perspectives. Cao, Zhang and Huang (2022) defines job satisfaction as the degree to which employees have positive feelings about the job role they have undertaken. Chinese scholars have investigated the factors influencing the degree of compassion between leaders and subordinate members, and found that the degree of compassion between leaders and subordinates is positively related to subordinates' job satisfaction, and further verified that the structural factors of leaders and subordinates' job satisfaction are in a "U" shape relationship. Xu (2004) concluded that employee satisfaction is related to organizational support and that strong organizational support has a significant effect on employee satisfaction.

Herzberg (2007) divided the factors affecting job satisfaction into health care factors and motivational factors respectively, and believed that health care factors can only alleviate employees' existing dissatisfaction to a limited extent, but cannot fundamentally improve employees' subjective motivation and work motivation. Motivational factors, on the other hand, refer to employees' enthusiasm and motivation

through their efforts to obtain job promotions or salary improvements, and are accompanied by increased job satisfaction. The Chinese scholar Liang (2006) further verified the theory of Wanous and Wang Hui et al. by taking the employees of Chinese State-owned enterprises as the research object, and analyzed that the degree of external satisfaction and internal satisfaction are different for employees with different age, education, qualification, working years and marital status. Liu (2014) found through an empirical study that job satisfaction of frontline employees has a positive contribution to organizational commitment, and found that job satisfaction has a significant interaction between gender and age. Zhao (2009) took the post-80s as the research object of job satisfaction and proposed that the influencing factors affecting the job satisfaction of post-80s employees mainly focused on job compensation, nature of occupation, and work collaboration. Li (2008) concluded that job satisfaction is a significant predictor of creativity of knowledge-based employees. Further research pointed out that job satisfaction not only has an impact on employees' creativity, but also affects employees' productivity and outcomes through work behavior. Based on the study of employee satisfaction and job performance from an organizational perspective, Song (2022) concluded that the higher the employee's literacy level, the higher the employee's satisfaction and organizational commitment.

### **2.2.2 Literature review of organizational commitment**

Organizational Commitment (OC) refers to the loyalty, recognition and participation of members within the organization to the organization. Ha and Lee (2022) define organizational commitment as "a psychological state that reflects the relationship between the employee and the firm and creates a willingness to remain with the firm ". After generalizing and analyzing on the basis of existing theories, empirical studies found that organizational commitment has a stable psychological constraint on employees, and this constraint can also effectively guide employees' behavior to align with organizational goals. Mayer and Schoorman (1998) defined organizational commitment as the extent to which organizational members identify with the organization's goals and are willing to remain with the organization, and further proposed a three-factor model of organizational commitment, namely affective commitment, continuance commitment, and normative commitment. Affective commitment refers to the extent to which organizational members are involved in the organization, in participating in organizational social activities, i.e., the individual's own emotional investment in an entity, and a psychological tendency to identify with it. It includes the degree of identification with a value goal, the employee's sense of personal fulfillment, and the sacrifice and contribution to the benefit of the organization. Continuing commitment refers to the individual's awareness that once he or she leaves the organization he or she will lose the benefits attached to the existing values and therefore has to choose to remain in the organization. Normative commitment refers to the commitment to stay in the organization due to social responsibility formed by personal moral values or social influences. Liu and Wang (2004) define organizational

commitment as a sense of responsibility and employees' willingness to take the initiative to assume various responsibilities and obligations within the organization due to their long-term commitment to the company. Shen (2014) defines organizational commitment as the tendency of organizational members to strongly identify with and accept the goals and values of the organization and be willing to contribute themselves to the organization and stay in the organization.

The exploration of the factors influencing organizational commitment by scholars from various international parties has been the focus of theoretical attention. International scholars' research on organizational commitment has focused on causal variables, which can be summarized into three categories, namely, organizational factors, work factors, and personal factors. Organizational factors refer to the institutions or systems within the organization, corporate culture, management climate and management's acceptance of new perspectives; job factors refer to a range of job-related factors such as job satisfaction, the work environment and job challenge; and personal factors are expressed in terms of an individual's age, years of experience, and education. For example, Mahanta (2012) found that individual members have a significant effect on employees' organizational commitment in terms of demographic variables, i.e., employees' age, job tenure, or position, etc. Tang (2006) suggested that different personality traits of corporate employees are significantly different for organizational commitment, with particularly significant variability in age, gender, years of work experience and education. At the level of job factors, for example, in a study by Zhang and Liu (2015) on organizational culture and organizational commitment, it was found that the factors associated with individual members' jobs are mainly reflected in job inertia, job risk, job loyalty, and job values, and the results of the study showed that the orientation culture of individual members has a positive and positive influence on organizational commitment. The sociologist Ha and Lee (2022) found that the factors influencing organizational commitment stem from organizational members' sense of responsibility to the organization, which is an internalized behavioral norm. For this norm is more influenced by individual family factors, learning and education factors and social group factors. At the level of organizational factors, as noted in the study of Zhan (2014), changes in characteristics within the organization affect the organizational commitment of employees. In an empirical study of 254 employees from different companies on organizational equity, organizational commitment and propensity to leave, Tian (2014) found that factors such as organizational behavior all have a significant impact on employees' organizational commitment.

International scholars have focused on the consequential variables of organizational commitment on factors such as employees' propensity to leave, job performance, and organizational citizenship behavior, e.g., Chinese scholars Ling

(2001) argued that organizational commitment can be influenced by culture. Liu and Wang (2004) found that different work contexts have different effects on organizational commitment by exploring cultural differences between China and the West. Wang and Men (2017) and other scholars, based on psychological capital theory and social learning theory perspectives, found that organizational commitment has a significant contribution to job performance. An empirical study by Chinese scholar Li (2022), based on social exchange theory, found that organizational commitment and each dimension (normative commitment, continuance commitment, and affective commitment) have a positive contribution to employees' innovative behavior.

## **2.3 Theoretical review of studies related to job satisfaction and organizational commitment**

### **2.3.1 Social Exchange Theory**

Social Exchange Theory (SET), also known as behaviorist social psychology theory, first emerged in the United States in the 1960s and was formally proposed in the book *Social Behavior: Its Basic Forms*, published by American sociologist Homans (1961), which then quickly spread widely around the world. The main emphasis of the theory is on the psychological factors in human behavior, and he believed that each person clarifies people's social relationships by comparing what they give and what they receive. The social exchange theory has the following implications: first, it is believed that everyone has a resource and can use that resource to exchange with others; second, people are in a network of social relationships, and each person cannot enjoy all the resources alone, so they must exchange with others; third, in the process of exchange, people will first consider the difference in value between the two sides of the exchange, and how to achieve a balance of this Kim, So and Wirtz (2022) suggests that social exchange is an important way to increase the sense of obligation, reciprocity, and trust between people's relationships. As far as the distinction between exchange behavior and ordinary behavior is concerned, two basic conditions must be present: first, the goal behind a series of behaviors can only be achieved through genuine exchange activities between people; second, there are appropriate ways and means that can be taken in individual behavior to achieve the goal of the behavior. It follows that the occurrence of exchange behavior depends primarily on the ability of the actors on both sides of the exchange to respond in a correspondingly rewarding manner and thus to sustain such behavior.

### **2.3.2 ERG theory**

Alderfer (1969) improved and optimized Maslow's hierarchy of needs by means of empirical research, and concluded that there are three core levels of needs: the first is Existence needs, the second is Relatedness needs, and the third is Growth needs. Alderfer scholars believe that the less a certain level of need is satisfied, the more people desire and expect it. The more lower-level needs are satisfied, the more people desire

higher-level needs. The biggest difference between the ERG theory and Maslow's theory is that the survival needs in the ERG theory include the physiological needs and security needs of Maslow's needs; the interrelationship needs refer to the need to maintain interpersonal relationships, which corresponds to the social needs and self-esteem needs of Maslow's needs; and the growth needs refer to the need to maintain interpersonal relationships (Egbuta & Omojola, 2022). The need for growth and development refers to the individual's strong internal desire for development, which also includes some internal parts of Maslow's self-esteem and self-actualization. In contrast, Maslow's theory of needs tends to be more general, while ERG theory focuses on individual differences.

### **2.3.3 Two-factor theory**

Two-factor theory, the factors related to job satisfaction are called motivational factors, that is, the factors that can make employees feel satisfied are from the job itself or the job content, etc., called motivational factors. The factors related to job dissatisfaction are called health factors, i.e., the factors that can make employees feel dissatisfied come from aspects such as the work environment or work relationship, and are called health factors. In this process, Herzberg believes that job satisfaction is the psychological feeling of employees in the work process, and this feeling is determined by motivational factors, while the positive effect of health care factors is not a prerequisite for generating job satisfaction. Therefore, Herzberg suggests that when employees' health care factors are not satisfied, they will be dissatisfied; but even if employees' health care factors are satisfied, they will not play any motivational role in producing satisfaction. And the motivational factors such as personal growth factor, job challenge factor, and job interest can effectively play a motivational role in producing satisfaction among employees (Wang, 2018).

## **2.4 Research Relevant**

Based on the above review of the definitions and influencing factors of job satisfaction and organizational commitment, it can be seen that the current academic research on job satisfaction and organizational commitment has shown that there is a significant positive relationship between the high level of employee satisfaction and the high level of organizational commitment. In a large number of studies, scholars have generally used job satisfaction as the antecedent variable and organizational commitment as the outcome variable. However, there is no consensus on the relationship between job satisfaction and organizational commitment, so it can be summarized into the following three views: the effect of job satisfaction on organizational commitment, the effect of organizational commitment on job satisfaction, and the relationship between the two that is only correlated and does not have mutual influence.

#### The first: Job satisfaction affects organizational commitment

Most scholarly research tends to suggest that the generation of employee job satisfaction leads to the generation of organizational commitment. It is proposed that job satisfaction reflects only the transient emotions of employees about the existence of a job and is not a durable assessment response. And job satisfaction is more prone to change compared to organizational commitment. Therefore, relative to the instability and ease of formation of job satisfaction, it can be considered as an antecedent variable for generating organizational commitment rather than a consequence variable. Among many Chinese scholars, Zhang and Gu (2010) found a significant positive correlation between all dimensions of job satisfaction and affective commitment among organizational commitment factors by empirical research based on the logical framework that employees' personal idiosyncrasies have an impact on job satisfaction generation and satisfaction affects organizational commitment, and their consequential factors are positively correlated with all dimensions of organizational commitment. Nie (2014) concluded through questionnaire analysis that both learning organization culture and job satisfaction have positive effects on organizational commitment. And further suggested that the high level of job satisfaction directly acts on the high level of organizational commitment. Zhao (2014) found that job satisfaction and organizational commitment showed a significant positive correlation through a review and summary of 144 papers in the past 30 years. Huan, Chen and Lu (2015) found that employee satisfaction positively acted on organizational commitment through a questionnaire survey of employees in two agricultural enterprises in Wenzhou, but the impact of satisfaction on organizational commitment based on different levels was also different.

#### Type 2: Organizational commitment affects job satisfaction

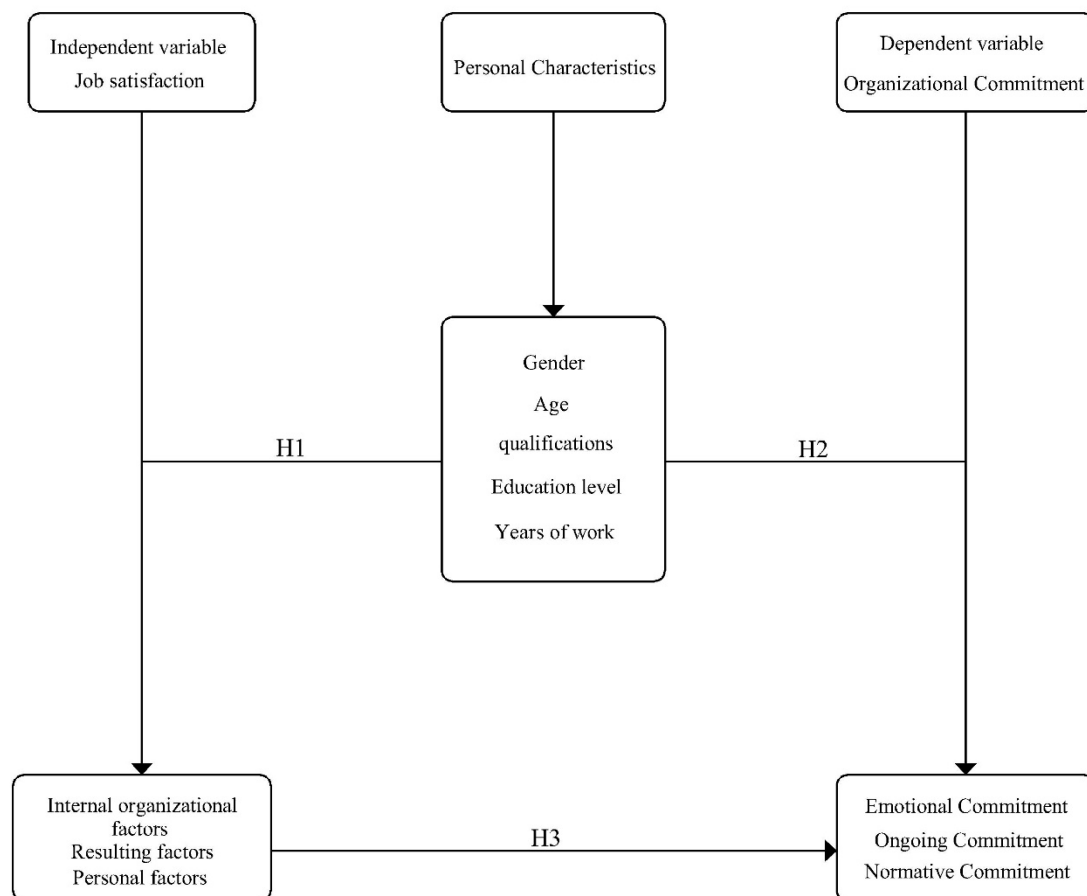
In previous scholarly studies when job satisfaction was explored as a mediator between organizational commitment and propensity to leave, there was a causal relationship between job satisfaction and organizational commitment, with organizational commitment being the antecedent variable and job satisfaction being the outcome variable.

#### Type 3: Job satisfaction and organizational commitment are only correlated

There is also a part of scholars who believe that there is only an interaction between job satisfaction and organizational commitment, or some scholars' studies have found an asymmetric influence relationship between the two. Therefore, it is proposed that the effect of job satisfaction on organizational commitment is stronger than the effect of the latter on the former. This view has also been widely supported and accepted in the studies of international scholars. From the above analysis of the relationship between the two, it is clear that there is a link between them. The Chinese scholar Huang (2004) found a positive correlation between each of the production supervisor job satisfaction constructs and each of the organizational commitment constructs through an

exploration of the three variables of job satisfaction, organizational commitment, and turnover propensity. An empirical study comparing employees' propensity to leave in state-owned and private systems suggested strong correlations between the five constructs of job satisfaction (i.e., promotion system, job itself, relationship with supervisor, relationship with colleagues, and compensation and benefits) and the constructs of organizational commitment (i.e., affective commitment, continuance commitment, and normative commitment).

## 2.5 Conceptual Framework



**Figure 2.1 Conceptual Framework**

## 2.6 Terms and Definition Used in This Study

### 2.6.1 Job satisfaction

Job satisfaction generally refers to a person's perception of the job itself and its related aspects, including the work environment, work status, work style, work pressure,



challenge, and interpersonal relationship at work, etc. during the process of working in an organization. It is a state of psychological perception of benign feelings. The origin of the study of job satisfaction is the famous Hawthorne experiment, which proved that the emotional factors of employees have a certain influence on their psychological factors, and to a certain extent, affect the job satisfaction of employees and the productivity of the organization. After job satisfaction was proposed, it became a topic of great interest to many scholars and was explored in depth and extensively. Hoppock was the first to propose the concept of satisfaction in 1935, and he believed that employee satisfaction is a subjective response of employees to their work environment, that is, an attitude to evaluate their work experience and work environment (Nie, 2014).

### **2.6.2 Job satisfaction**

The concept of organizational commitment was originally pioneered by Becker (1960), an American sociologist and one of the first scholars to conduct research on organizational commitment. and compelled to remain with the organization." Becker defines organizational commitment as "a complex psychological phenomenon in which employees are willing and compelled to stay with the organization as their commitment to the organization continues to increase" and points out that when employees first join an organization, they successively dedicate their time, energy, emotions, and skills to the business they are working for. And with the accumulation of years of work in the company, they will pay more and more hard work and labor, and the investment in the organization will continue to show an increase with the change of time. Based on this commitment, they start to have a strong sense of belonging to the organization in the process of working year by year, i.e., they prefer to stay in the organization as a psychological mechanism, which in turn reflects a psychological contract between employees and the organization and can motivate people to continue their professional behavior (Song, 2021). However, as the inquiry related to organizational commitment continues to unfold, Prentice (2022) presents a very different view from Becker, who argues that the term commitment represents an outpouring of emotion from an individual to an entity. There is also a segment of organizational behaviorists who have redefined employee organizational commitment. They suggest that commitment is not merely an economic tool, as Becker argues, but more of an emotional outpouring and dependence of employees on the organization. In other words, employees see their membership in the organization as a part of their lives because of their sincere feelings for the organization, and they willingly give their limited time and energy to the organization rather than fearing that they will suffer a huge financial loss if they leave the organization.

### **2.6.3 State-owned enterprises**

According to the Regulations of the People's Republic of China on the Registration and Administration of Enterprise Legal Persons, a state-owned enterprise is, in international practice, a form of enterprise in which the central or federal government of a country invests in, builds or participates in the control of the enterprise. In China,

State-owned enterprises also cover enterprises with local government investment participation, construction or control. It can be understood that the government's will and interests determine all actions of State-owned enterprises. A state-owned enterprise is a form of production and management organization with the characteristics of a profit-making legal person and a public interest legal person. Its profitability is reflected in the preservation and appreciation of the value of state-owned assets. Its public welfare nature is mainly manifested in the establishment of State-owned enterprises in most cases is to achieve the goal of national economic regulation, playing a role in reconciling various aspects of the national economy. The so-called state-owned enterprise nature is the nature of the national ownership of enterprises. In essence, it is an enterprise whose means of production are jointly owned by all the people. Universal ownership is a specific form of socialist production relations. When China realized the planned economy, the national ownership enterprises were embodied in the specific realization form of state ownership (Zhang, 2016).

## **Chapter 3 Research Methodology**

### **3.1 Introduction**

This paper uses a quantitative research method to investigate the effect of employee job satisfaction on organizational commitment in Chinese State-owned enterprises. Based on the principle of whether the actors on both sides of the exchange can make correspondingly rewarding responses to maintain the balance between the two sides in the social exchange theory, the employees' job satisfaction leads to their loyalty and willingness to devote themselves to the organization as a reward for the organization. Based on EGR theory and Herzberg's two-factor theory, the concept and degree of job satisfaction of individual employees are explored, and then the real needs of employees are explored to promote their job satisfaction. At the same time, the health care and motivational factors in the two-factor theory can also be used as a way to explore the true needs of employees and promote employee satisfaction.

Based on the above theory, the third section of this paper discusses the effect of employee satisfaction and organizational commitment on the two variables in Chinese State-owned enterprises and further discusses the research proposal. Based on the above hypotheses, the research hypothesis of this paper is proposed and the questionnaire is designed based on the established scales developed and used by international scholars. The reliability and validity of the variables in the questionnaire and the dimensions of the variables were also validated.

### **3.2 Research Design**

In this chapter, job satisfaction and organizational commitment were measured by using international scales with good reliability and validity. The first part contains the basic information of individuals, including gender, education, age and years of experience of employees in State-owned enterprises. "1 indicates strongly disagree," "2 indicates disagree," "3 indicates not sure," "4 indicates agree," and "5 indicates agree." "5 strongly agree".

In a review of previous job satisfaction scales developed or reworked by international scholars, the most representative scale is the Minnesota Job Satisfaction Short Form. Its structure is relatively simple and its reliability is good. In this paper, Chinese scholars Zhang and Gu (2010) used a scale to measure job satisfaction based on the short version of the Minnesota Job Satisfaction Scale, which was referenced and revised for the Chinese context. The scale contains a total of 18 questions, of which the intra-organizational contextual factor dimension is related to the job itself and leadership behavior, specifically including 1-10 questions measuring intra-

organizational contextual factors; the outcome factor dimension basically covers the measurement of employee satisfaction with job rewards with 5 questions, specifically including 11-15 questions; the personal factor dimension covers the measurement of personal satisfaction with job fulfillment with 3 questions, specifically including 16-18 questions. The dimension of personal factor covers the measurement of personal satisfaction in job fulfillment with 3 questions, including 16-18 questions.

Organizational commitment is considered to be one of the very important employee attitude variables in HRM research and can be understood as the acceptance of organizational goals and organizational values, the willingness to put in one's own efforts to reflect the organization, and the desire to stay in that organization. Allen and Mever (1990) classified organizational commitment into three dimensions: affective commitment, sustaining commitment, and normative commitment, which are internationally recognized by scholars. In this paper, Chinese scholars Qiao and Wang (2009) used Allen and Meyer's (1990) research results and translated their scale to measure organizational commitment with ordinary employees in Chinese private SMEs as the research subjects. The scale consists of 15 questions, including six questions on the continuance commitment dimension, including B1-B6, which are reverse scored; five questions on the normative commitment dimension, including B7-B11; and four questions on the affective commitment dimension, including B12-B15.

### **3.3 Hypothesis**

H1: There are significant differences in the demographic variables of job satisfaction and organizational commitment among employees of state-owned enterprises in terms of gender, age and education level.

H2: Job satisfaction of employees in State-owned enterprises has a significant positive effect on organizational commitment

H2a: All dimensions of job satisfaction of employees in state-owned enterprises have a significant positive effect on all dimensions of organizational commitment

H3: Job satisfaction and organizational commitment of employees in state-owned enterprises are predictive

### **3.4 Population and Sampling**

The overall sample for this study was 10,200 employees from State-owned enterprises in Shanxi Province, China, and 420 employees were selected by random sampling as the survey sample for this study. Before starting this survey, the age of the

respondents was divided into four stages: below 30 years old, 31-40 years old, 41-50 years old and above 51 years old; due to the special employment nature of State-owned enterprises, the working years of the employees were divided into four stages: below 5 years, 6-10 years, 11-20 years and above 21 years. In this paper, we divide the academic qualifications of the employees of State-owned enterprises into four stages: undergraduate, undergraduate, master and doctor. The years of work are classified as less than 5 years, 6-10 years, 11-20 years and more than 21 years; the types of employees of State-owned enterprises can be understood as employees who are engaged in relevant work in enterprises invested, constructed or controlled by the central government or local government, i.e., enterprises such as institutions and agencies. In the selection of survey subjects strictly in accordance with the characteristics of employees of State-owned enterprises to be selected.

### **3.5 Sampling**

In this study, random sampling was selected for the sample selection process. Random sampling means that each part of the total number of examinees has a chance to be selected as a possibility, also in full accordance with the principle of equal opportunity distribution of the sample, also known as "equal probability" event, is a method often used in sampling surveys. According to the random principle of sampling, each respondent in the overall population is guaranteed to have a known, non-zero probability of being the subject of the study, taking into account that this ensures the representativeness and universality of the sample as much as possible. In this paper, Yamane's (1967) sampling table was mainly used for sampling with 95% confidence interval (Jin, Du & Jiang, 2002).

### **3.6 Sample Size**

The overall study population was 10,200 employees from 19 state-owned enterprises in Shanxi Province, China, and the sample size was calculated using Slovin's formula with a 95% confidence interval (i.e.,  $P=0.05$ ). The values corresponding to 10200 and 5% confidence interval were calculated according to the formula, resulting in a sample size of 385. To ensure the validity of the sample or the accuracy of the findings, the sample size was enlarged to 400 during the study period. A total of 420 copies of this questionnaire were distributed and after eliminating the invalid questionnaires, a total of 406 valid questionnaires were collected. This was used for further analysis of the sample for this sampling.

$$N = \frac{N}{1+(Ne^2)}$$

$$N = \frac{10200}{1+ (10200(0.05)^2)}$$

$$N = \frac{10200}{1+25.5}$$

$$N = 385$$

(Equation 3-1)

### 3.7 Data Collection

After the sample size and scope of the survey were further determined, the questionnaire was prepared, distributed and collected through the web version of "Questionnaire Star". The questions of each subscale were first imported into "Questionnaire Star" and set up for anonymous completion and one-way selection, and the respondents were clearly informed of the purpose of the study and the specific requirements for completion on the first page of the questionnaire. The questionnaire was then distributed through the QR code or URL automatically generated by the web version of "Questionnaire Star" and shared with the "Questionnaire Star" app on WeChat. After confirming that the questions were correct, the data were collected formally through the backend of "Questionnaire Star" (Yi, 2022). During this process, we had to wait patiently for the questionnaire to be completed and submitted. In the process of obtaining the sample data, we made full use of our friends and colleagues' interpersonal relationships to select as many respondents as possible to match the characteristics of State-owned enterprises employees. After the sample data were collected, the samples were screened and 406 valid questionnaires were obtained after eliminating the invalid questionnaires, and the valid questionnaires were analyzed in SPSS27.0.1.

### 3.8 Data Analysis

#### 3.8.1 Basic situation description

In this paper, we adopt a quantitative research approach to collect data by means of a questionnaire for the study population, and conduct descriptive statistical analysis of the collected valid data through SPSS27.0.1. Descriptive statistical analysis can be said to be an important part of the sample data analysis process and an important way for us to process the data. The meaning of descriptive statistics refers to a number of processes such as organizing, analyzing and describing the sample data collected during the research process. It is a process of organizing, analyzing and describing the sample data collected in the course of the study, and describing the basic information and distribution characteristics of the sample data in the form of graphs or mathematical operations. Generally speaking, descriptive statistics involves three types of data:

concentration trend, dispersion trend and data distribution characteristics. Among them, the concentration trend and dispersion trend can be in the form of frequency, mean, standard deviation and variance; the distribution characteristics of the data can be described by the analysis methods of kurtosis and skewness. For the above analysis methods frequency can be interpreted as the value that occurs most often in the value of the variable, and the proportion reflects the percentage of each frequency in the overall sample as well as the effective and cumulative percentages. The mean reflects the trend of concentration and dispersion in a set of data. Li, Zhao, Johari and Weintraub (2022) Variance or standard deviation can be understood as the degree of dispersion of a set of data; the meaning of categorical summary is set based on a certain categorical variable. For the distribution of the data on the two analysis methods involved skewness and kurtosis, skewness can be interpreted as a set of statistics describing the symmetry of the values taken by the variables. If the skewness is zero, the distribution is symmetric (i.e., the total deviation is equal); if the skewness is greater than zero, the skewness is positive, and if the skewness is less than zero, the skewness is negative. The kurtosis describes a distribution pattern among the variables, which mainly reflects the steepness of the variables. If the kurtosis is 0, it can mean that the sample data is as steep as the standard normal distribution. When the peak is greater than 0, it means the data distribution is steeper than the standard normal distribution, i.e., a spike distribution; when the kurtosis is less than 0, it means the data distribution is flatter than the standard normal distribution (i.e., a flat distribution). Inter-group variable analysis describes a distribution of multiple variables presenting different values. joint distribution characteristics of multiple variables and is used to analyze the correlation effect between multiple variables (Juon, 2023).

### **3.8.2 Statistical description of the sample**

This subsection uses SPSS 27.0.1 statistical software to perform descriptive statistical analysis of the distribution characteristics of the mean, skewness, and kurtosis of the sample data, and the specific analysis results obtained are shown in Tables 3.1below.

Table 3.1 Descriptive analysis of variables

Factors and question items	Average value	Skewness	Kurtosis	Factors and question items	Average value	Skewness	Kurtosis
Job satisfaction				Organizational Commitment			
A1	3.90	-0.921	0.376	B1	2.14	0.666	-0.269
A2	3.85	-0.800	-0.027	B2	2.19	0.692	-0.144
A3	3.63	-0.620	-0.311	B3	2.44	0.561	-0.423
A4	3.54	-0.615	-0.252	B4	2.52	0.543	-0.388
A5	3.77	-0.749	-0.164	B5	2.28	0.672	-0.076
A6	3.91	-0.846	0.095	B6	2.35	0.594	-0.347
A7	3.81	-0.840	0.273	B7	3.76	-0.791	-0.229
A8	3.59	-0.628	-0.131	B8	3.69	-0.704	-0.363
A9	3.72	-0.674	-0.141	B9	3.48	-0.613	-0.488
A10	3.67	-0.629	-0.356	B10	3.55	-0.602	-0.489
A11	4.20	-1.387	1.594	B11	3.62	-0.691	-0.432
A12	4.12	-1.292	1.220	B12	4.05	-1.087	0.772
A13	3.89	-0.921	0.248	B13	3.95	-0.910	0.258
A14	3.97	-1.022	0.619	B14	3.68	-0.702	-0.098
A15	4.04	-1.128	0.704	B15	3.82	-0.848	0.132
A16	4.16	-1.347	1.642				
A17	4.00	-1.057	0.721				
A18	3.81	-0.810	0.027				

Based on the analysis results in Tables 3.1 above, it can be seen that the absolute values of skewness and kurtosis of the surveyed sample data are less than 3. Therefore, it indicates that the values of the variables are approximately obeying the requirements of normal distribution, and the next exploratory factor analysis and subsequent studies can be conducted.

### 3.9 Reliability and validity analysis of the scale

#### 3.9.1 Reliability analysis of the scale

In this paper, the reliability of the questionnaire is measured using the Cronbach's internal consistency coefficient, which is commonly used by international scholars. The alpha coefficient of Cronbach's internal consistency, which is commonly used by



scholars in research, is used as a criterion for reliability, as it indicates the reliability of the data or results obtained by using the same observation method for the same subject. The alpha coefficient refers to the consistency of scores between items on the scale, with higher values indicating better correlation between items and vice versa. alpha coefficients range from 0 to 1. For general social research studies, a Cronbach's alpha coefficient of 0.80 or above should be used in the final measurement, while a Cronbach's alpha coefficient between 0.70 and 0.80 indicates good reliability, which is acceptable. 's alpha coefficient is below 0.6, in order to ensure that the data has high reliability one has to consider reformulating the questionnaire (Shao, 2018). The Cronbach 's alpha internal consistency coefficients of the job satisfaction questionnaire are shown in Table 3.2.

Table 3.2 Reliability analysis of questionnaire scales and each dimensional scale

Factor	Number of items	Cronbach's alpha
Organizational internal contextual factors	10	0.888
Outcome factors	5	0.885
Personal factors	3	0.830
Ongoing Commitment	6	0.880
Normative Commitment	5	0.866
Emotional Commitment	4	0.836
Job satisfaction questionnaire	18	0.908
Organizational Commitment Questionnaire	15	0.864

According to the statistical results in Tables 3.2, the Cronbach's a of the related scales and dimensions are above 0.8 and both are above the level of 0.8. It indicates that the reliability of these two scales and the corresponding dimensions are high. Therefore, it can be said that the sample data obtained in this study have high reliability and are suitable for the next step of factor probing.

### 3.9.2 Validity analysis of the scale

Validity can be understood as a kind of validity, which is used to reflect the degree of truthfulness and correctness of a study, i.e., the degree of validity of a research objective accurately measured by a measurement instrument. Based on the fact that validity is specific to a particular goal, the judgment of validity is relative and varies only in degree. Validity can be divided into three categories: content validity, criterion validity, and structural validity. In this study, the scales were selected with reference to the scales developed by international scholars with a high degree of maturity or widely used by scholars. Therefore, it can be ensured that the measurement scales used have

good content validity. Construct validity refers to the extent to which the theoretical concepts and features are measured, and can be understood as the extent to which the test correctly validates the theoretical constructs for which it was developed. In this study, the structural validity was analyzed by selecting the general KMO and Bartlett's spherical tests. In general, when the KMO value is above 0.6, the validity is acceptable, and the greater the value is close to 1, the more suitable the scale is for factor analysis; a Bartlett's sphericity test below 0.05 confidence level indicates that the scale is suitable for factor analysis (Liu, 2014). In the first step of this study, the Bartlett Test of Sphericity and the Kaiser-Meyer-Olkin (KMO) test were conducted for the "job satisfaction" and "organizational commitment" scales.) tests. In the second step, the common factors were extracted using Principal Factor Analysis (PFA) and combined with Varimax to rotate the common factors so that the loadings of each factor within the rotated common factor were as large as possible, while the loadings on the other factors were as small as possible, so that the common factors could be identified and named. identification and naming.

(1) Validity test of job satisfaction scale

Table 3.3 Bartlett's spherical test and KMO test for job satisfaction

KMO value		0.929
Bartlett's sphericity test	Card side	3275.908
	df	153
	Sig.	0.000

For the exploratory factor analysis of job satisfaction, the test results showed that the KMO value of organizational identity was 0.929 and the cartesian value of Bartlett's spherical test was 3275.908. The significance level is 0.000, which is suitable for doing factor rotation. For the original data according to the criterion of eigenvalue greater than 1, principal component analysis was selected to extract the factors, and the results of the analysis are shown in Table 3.4.

Table 3.4 Total variance explained

Proj ects	Eigenvalue			Extraction of squares and loading			Rotate square and load		
	Tot al	Varian ce %	Cumul ative	Tot al	Varian ce %	Cumulat ive %	Tot al	Varian ce %	Cumulat ive %
1	7.0 41	39.116	39.116	7.0 41	39.116	39.116	4.8 33	26.852	26.852
2	2.1 20	11.775	50.891	2.1 20	11.775	50.891	3.5 01	19.449	46.302
3	1.5 54	8.632	59.523	1.5 54	8.632	59.523	2.3 80	13.221	59.523
4	0.7 02	3.901	63.423						
5	0.6 40	3.557	66.980						
6	0.6 24	3.467	70.447						
7	0.5 92	3.291	73.739						
8	0.5 82	3.233	76.971						
9	0.5 57	3.097	80.068						
11	0.5 40	3.000	83.069						
12	0.4 91	2.726	85.795						
13	0.4 59	2.549	88.344						
14	0.4 11	2.285	90.629						
15	0.3 82	2.123	92.752						
16	0.3 63	2.018	94.770						
17	0.3 30	1.834	96.604						
18	0.3	1.764	98.368						

The above statistical results show that there are 3 factors with eigenvalues greater than 1, explaining 59.523% of the results. The results of the tests after factor rotation using the maximum variance method are shown in Tables 3.5.

Table 3.5 Rotated component matrix

Factor	Ingredients		
	1	2	3
A1 has the opportunity to take things his own way	0.638		
A2 has a sense of respect because of my work	0.737		
A3 is satisfied with the way the company is currently implementing the policy	0.640		
A4 Satisfied with the way superiors make decisions	0.709		
A5 Good work performance will be praised by superiors	0.621		
A6 Good work performance will be praised by colleagues	0.667		
A7 can get a sense of accomplishment from the work	0.636		
A8 I was satisfied with the way I was treated by my superiors	0.666		
A9 The current working environment of the company makes me feel satisfied	0.684		
A10 I get along well with my colleagues in the company	0.688		
A11 I am able to give full play to my abilities in my work		0.787	
A12 My job makes me feel secure about my future		0.811	
A13 My current job gives me the opportunity to advance		0.773	
A14 company will provide me with training opportunities		0.793	
A15 I am satisfied with the salary of my current job		0.815	
A16 My job gives me the opportunity to use my abilities			0.816
A17 In my work, I can use professional knowledge and judgment			0.828
A18 At work, I have the opportunity to serve others			0.818

According to the above Table 3.5, regarding the job satisfaction scale, three factors were identified after factor rotation and were in accordance with the three-dimensional structure of job satisfaction. The first factor identified had an eigenvalue of 7.041, which was able to explain 39.116% of the results. The items included A1, A2, A3, A4,

A5, A6, A7, A8, A9, and A10, which are the internal contextual factors; the second factor was identified with an eigenvalue of 2.120, which could explain 50.891% of the results. The second factor was identified with an eigenvalue of 2.120, which explained 50.891% of the results. The five items included were A11, A12, A13, A14, and A15, which were the outcome factors; the third factor was identified with an eigenvalue of 1.554, which explained 59.523% of the results. The items included were A16, A17, and A18, i.e., the personal factor dimension; this is in line with Zhang and Gu (2010) revision of the Minnedah Job Satisfaction Shortcomings Scale.

(2) Validity test of organizational commitment scale

Table 3.6 Bartlett's sphericity test and KMO test for organizational commitment

KMO value		0.893
Bartlett's sphericity test	Card side	2708.029
	df	105
	Sig.	0.000

For the exploratory factor analysis of job satisfaction, the test results showed that the KMO value of organizational identity was 0.893, the Bartlett's spherical test chi-square value was 2708.029, the degree of freedom was 105, and the significance level was 0.000, which was suitable for doing factor rotation. For the original data according to the criteria of eigenvalues greater than 1, principal component analysis was selected to extract the factors, and the results of the analysis are shown in Table 3.7.

Table 3.7 Total variance explained

Projects	Eigenvalue			Extraction of squares and loading			Rotate square and load		
	Total	Variance %	Cumulative	Total	Variance %	Cumulative	Total	Variance %	Cumulative
1	5.205	34.701	34.701	5.205	34.701	34.701	3.754	25.027	25.027
2	2.472	16.478	51.179	2.472	16.478	51.179	3.282	21.877	46.905
3	2.061	13.738	64.917	2.061	13.738	64.917	2.702	18.012	64.917
4	0.544	3.626	68.542						
5	0.538	3.589	72.131						
6	0.515	3.434	75.564						
7	0.498	3.318	78.882						
8	0.467	3.112	81.993						
9	0.449	2.994	84.988						
11	0.433	2.890	87.877						
12	0.402	2.678	90.556						
13	0.380	2.531	93.086						
14	0.370	2.466	95.553						
15	0.351	2.338	97.891						

The above statistical results show that there are three factors with eigenvalues greater than one extracted by the principal component analysis method, explaining 64.917% of the results. The results of the tests after factor rotation by the maximum variance method were selected as shown in Table 3.8.

Table 3.8 Rotated component matrix

Factor	Ingredients		
	1	2	3
B1 has a slight change in the current situation that would make me leave the company	0.773		
B2 Even if you work at this company indefinitely, you won't get much out of it.	0.773		
B3 If the work is similar, I am willing to work for another company	0.763		
B4 It is my misfortune to have to work in this company	0.790		
B5 I often have difficulty agreeing with important corporate policies regarding employees	0.763		
B6 I rarely feel loyalty to this business	0.792		
B7 I am willing to accept any job in order to stay with this company		0.801	
B8 I told my friend this business is a good place to work		0.787	
B9 For me, working in this company is better than in all other companies		0.778	
B10 This company can really inspire me to work		0.802	
B11 I find my values and the company's values are very similar		0.777	
B12 I am very concerned about everything that happens in the business			0.805
B13 I am willing to put in twice as much effort to help this business succeed			0.811
B14 I am very happy to work for this company			0.806
B15 I am proud to tell people I work in this business			0.795

According to the above Table 3.8, regarding the organizational commitment scale, three factors were identified after factor rotation and were consistent with the three-dimensional structure of organizational commitment. The eigenvalue of the first factor it identified was 5.205, which was able to explain 34.701% of the results. The six items included are B1, B2, B3, B4, B5, and B6, which are the dimensions of sustained commitment; the second factor identified has an eigenvalue of 2.472, which explains 51.179% of the results. The second factor was identified with an eigenvalue of 2.472, which explained 51.179% of the results. The items included were B7, B8, B9, B10, and B11, which were the normative commitment dimensions; the third factor was identified with an eigenvalue of 2.061, which explained 64.917% of the results. The items it contains are four items B12, B13, B14, B15, i.e., affective commitment dimensions;

and it is in line with Qiao, Luan and Wang (2009) translation of the organizational commitment measurement scale with reference to Allen and Meyer's (1990) research results.



## Chapter 4 Result of the Study

### 4.1 Introduction

In this chapter, the 406 valid questionnaires collected in the questionnaire survey were analyzed by SPSS27.0.1 software. First, based on the questionnaire reliability and validity tests, descriptive statistical analysis was conducted on the collected valid data (which included sample size, percentages, etc.); second, demographic correlation analysis as well as regression analysis (including independent sample t-test, one-way ANOVA, correlation analysis, chi-square test, and regression analysis, etc.) were conducted on the sample data; finally, for this sample analysis Finally, the results were used to verify the research hypothesis of this paper.

### 4.2 Description of statistical variables

#### 4.2.1 Analysis of sample data structure

For the sample data analysis of the returned questionnaires using SPSS27.0 statistical software, the sample composition is shown in Table 4.1 below:

Table 4.1 Basic analysis of sample structure

Demographic variables		Number of samples	Percentage
Gender	Male	243	59.9
	Female	163	40.1
	Total	406	100.0
Age	Under 30 years old	88	21.7
	31-40 years old	229	56.4
	41-50 years old	74	18.2
	Over 51 years old	15	3.7
	Total	406	100.0
Academic qualifications	Below bachelor's degree	77	19.0
	Undergraduate	295	72.7
	Master's Degree	26	6.4
	PhD	8	2.0
	Total	406	100.0
Years of work	Less than 5 years	27	6.7
	6-10 years	283	69.7
	11-20 years	80	19.7
	More than 21 years	16	3.9
	Total	406	100.0

According to the results of the above statistical information shows a total of 243 male bias, accounting for 59.9% of the total number, and 163 female, accounting for 40.1% of the total number. As shown by the pie chart by gender in Figure 4-1:

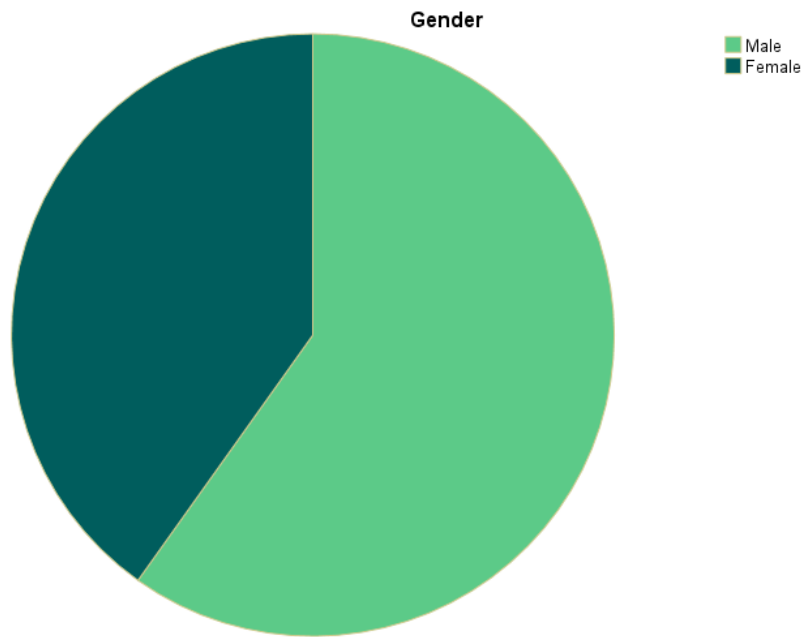


Figure 4.1 Pie chart by gender

The above statistics are mainly concentrated in the age group of 31-40 years old, whose number is 229, accounting for 56.4% of the total number of employees, followed by employees under 30 years old and 41-50 years old, which account for 21.7% and 18.2% of the total number of employees, in that order. Lastly, the least number of employees were over 51, with only 15 people accounting for 3.7% of the total number. As shown by the pie chart by age in Figure 4-2:

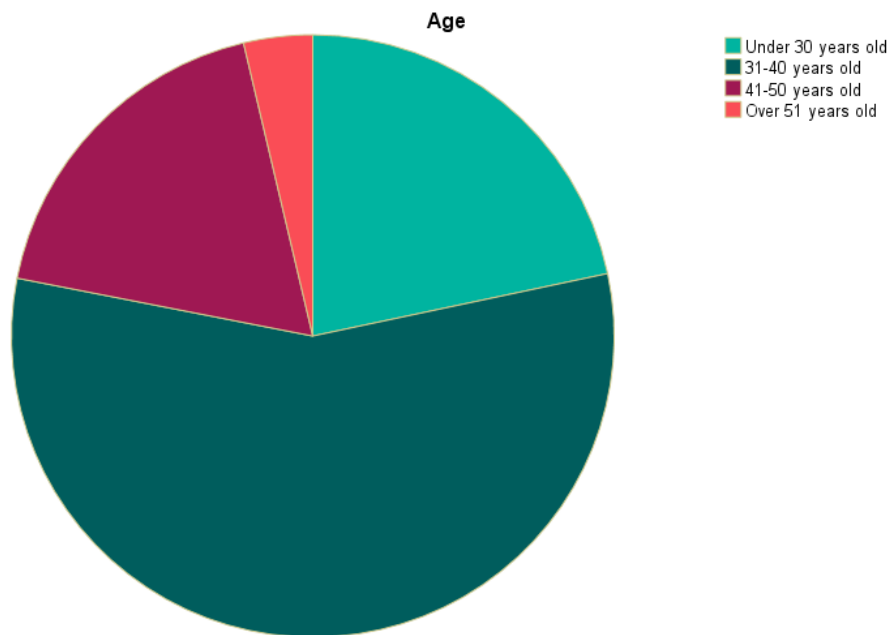


Figure 4.2 Pie chart by age

In the survey of education, it can be found that due to the special employment system of state-owned enterprises, the education requirement for entry-level employees is generally above bachelor's degree. In this study, considering that people with less than bachelor's degree are likely to be the earliest group of employees entering the enterprise, the restriction on education is not so high. From the above survey results, we can see that the number of employees with bachelor's degree is 295, accounting for 72.7% of the total number of employees; followed by 77 employees with less than bachelor's degree, accounting for 19% of the total number of employees; 26 employees with master's degree, accounting for 6.4% of the total number of employees; and the least number of employees with doctorate, accounting for 2% of the total number of employees. As shown by the pie chart by education in Figure 4-3:

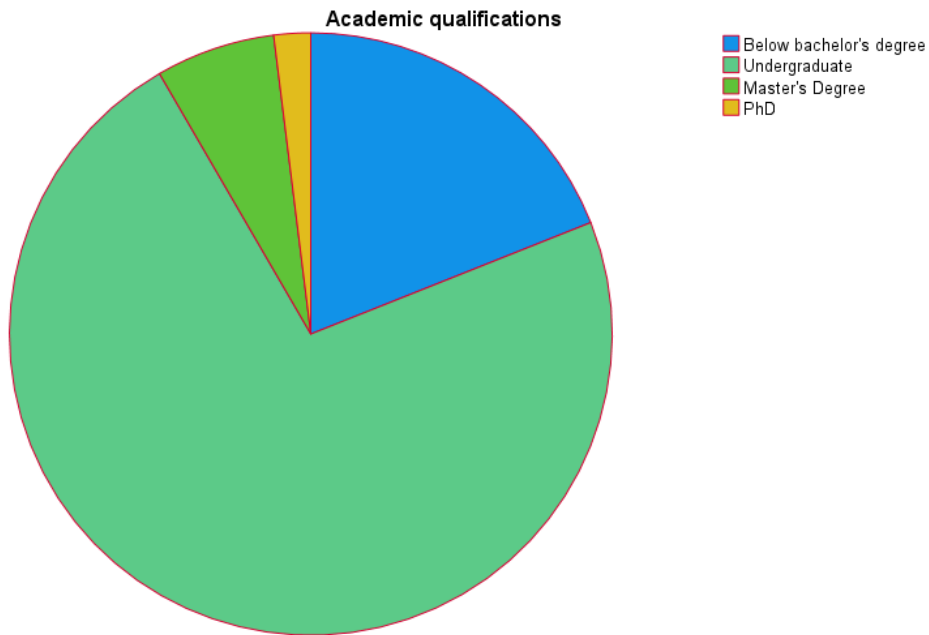


Figure 4.3 Pie chart by education

According to the statistical results of the above working years, it can be understood that the majority of employees with 6-10 years account for 69.7% of the total number of employees, followed by 80 employees with 11-20 years, accounting for 19.7% of the total number of employees; 6.7% of employees with 5 years; and the least number of employees with 21 years or more accounts for 3.9%. As shown by the pie chart by years of service in Figure 4-4:

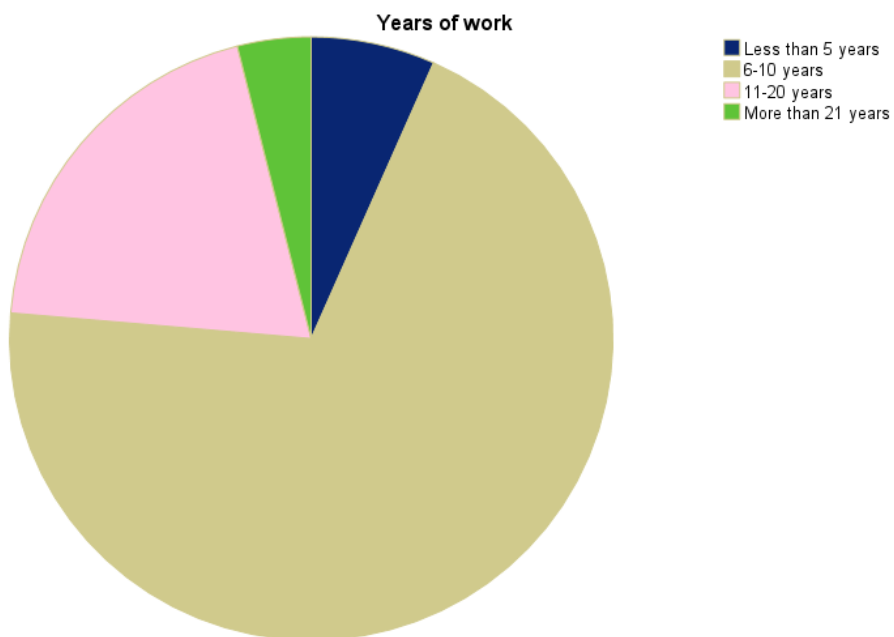


Figure 4.4 Pie chart by years of experience

### 4.3 Results of the Study

#### 4.3.1 Independent sample t-test on gender

The results of the independent sample t-test regarding gender are shown in Table 4.2 below. The F-values of the chi-square test for job satisfaction and organizational commitment on gender were 1.064 and 6.774, respectively, and their corresponding P-values were 0.303 and 0.010, respectively, where the P-values for job satisfaction were greater than the 5% significance level (i.e.,  $P > 0.05$ ) indicating that the variances for males and females were equal and could be subjected to the next step of ANOVA. The independent sample t-test for job satisfaction had a t-value of -0.409 and a p-value of 0.683 i.e. p-value greater than 5% significant level ( $p > 0.05$ ) further indicates that there is no significant difference between the cognitive level of males and females in terms of job satisfaction.

The F-value of the chi-square test for organizational commitment on gender is 6.774, and its corresponding P-value is 0.010, which is less than the 5% significance level (i.e.,  $P < 0.05$ ) indicating that the chi-square tests for males and females are not equal and cannot be continued in the next step of ANOVA; in conclusion, there is no significant difference in the perceived level of job satisfaction between male and female employees on gender in Company M.

Table 4.2 Independent sample t-test on gender

Variables	Gender	Chi-square test		Average value	Independent samples t-test	
		F-value	P-value		T-value	P-value
Job satisfaction	Male	1.064	0.303	69.38	-0.409	0.683
	Female			69.88		
Organizational Commitment	Male	6.774	0.010	47.72	Not tested	Not tested
	Female			47.21		

#### 4.3.2 One-way ANOVA on age

In this study, a one-way ANOVA was conducted by conducting a one-way ANOVA on employees of different age groups in Company M. The results are shown in Table 4-3. In the chi-square test, the F-values of job satisfaction and organizational commitment were 1.688 and 0.094, respectively, and the P-values were 0.169 and 0.963, respectively; the P-values of their tests were all greater than the significant level of 0.05 (i.e.,  $P > 0.05$ ), which can indicate that the chi-square tests of job satisfaction and organizational commitment of employees of different age groups in Company M were equal and the data fluctuated consistently. Therefore, we can proceed to the next step of ANOVA. The F-statistic values of one-way ANOVA for employee satisfaction and organizational commitment are 0.352 and 1.750, respectively, and the P-values are 0.788 and 0.156 are greater than the significant level of 0.05 (i.e.,  $P > 0.05$ ). In summary, there were no

significant differences in the perceived levels of the two variables of job satisfaction and organizational commitment among the employees of different age groups in company M.

Table 4.3 One-way ANOVA on age

Variables	Age	Chi-square test		Average value	Independent samples t-test	
		F-value	P-value		T-value	P-value
Job satisfaction	Under 30 years old	1.688	0.169	70.48	0.352	0.788
	31-40 years old			69.60		
	41-50 years old			68.59		
	Over 51 years old			68.73		
Organizational Commitment	Under 30 years old	0.094	0.963	54.64	1.750	0.156
	31-40 years old			56.60		
	41-50 years old			54.66		
	Over 51 years old			52.73		

#### 4.3.3 One-way ANOVA on educational attainment

In this study, a one-way ANOVA was conducted on the education of the employees of Company M. The results are shown in Table 4.4. In the chi-square test, the F-values of job satisfaction and organizational commitment were 4.092 and 6.020, respectively, with P-values of 0.007 and 0.001, respectively; the P-values of their tests were all less than the significant level of 0.05 (i.e.,  $P < 0.05$ ), indicating that the chi-square tests of employees' education in company M were not equal in the two research variables of job satisfaction and organizational commitment, and thus could not be continued in the next step of The variance chi-square test on job satisfaction and organizational commitment of the employees of enterprise M in terms of their education is explained by the unequal mean values of each dimension. Due to the specificity of China's own system of State-owned enterprises, the requirements for employees' education are generally limited to bachelor's degree and above, but the work they do after joining is strictly enforced according to national policies or local government instructions and corresponding rules and regulations, and the pursuit of corporate performance is not the main goal of State-owned enterprises. In this process, employees only need to complete the tasks explained by their superiors and handle them according to the rules and regulations. This limits the development of employees' own independent innovation ability, so it is normal that their satisfaction and organizational commitment have unequal variance in each dimension of education. Secondly this may be related to the insufficient number of

samples collected in this study, and the perceived levels of job satisfaction and organizational commitment in terms of educational qualifications can be further examined in future studies with larger samples.

Table 4.4 One-way ANOVA on educational attainment

Variables	Academic qualifications	Academic qualifications		Average value	One-way ANOVA	
		F-value	P-value		F-value	P-value
Job satisfaction	Below bachelor's degree	4.092	0.007	67.19	Not tested	Not tested
	Undergraduate			70.92		
	Master's Degree			63.15		
	PhD			64.13		
Organizational Commitment	Below bachelor's degree	6.020	0.001	53.75	Not tested	Not tested
	Undergraduate			56.76		
	Master's Degree			51.19		
	PhD			49.25		

#### 4.3.4 One-way ANOVA on years of work experience

In this study, a one-way ANOVA was conducted by conducting a one-way analysis of variance (ANOVA) on the years of experience of the employees of Company M. The results are shown in Tables 4.5. In the chi-square test, the F-values of job satisfaction and organizational commitment were 1.006 and 3.350, with P-values of 0.390 and 0.019, respectively; the P-values of job satisfaction were greater than the significant level of 0.05 (i.e.,  $P > 0.05$ ), the variances were equal and the data fluctuated consistently, and all of them had chi-square, so the ANOVA could be continued in the next step. In contrast, the p-value of organizational commitment is less than the significant level of 0.05 (i.e.,  $P < 0.05$ ), the variances are not equal, and the next step of ANOVA cannot be performed. Therefore, in summary, it can be said that there is no significant difference between employees' years of service on the perceived level of employee job satisfaction.

Table 4.5 One-way ANOVA on years of work experience

Variables	Years of work	Academic qualifications		Average value	One-way ANOVA	
		F-value	P-value		F-value	P-value
Job satisfaction	Less than 5 years	1.006	0.390	67.37	0.861	0.461
	6-10 years			69.91		
	11-20 years			69.86		
	More than 21 years			66.00		
Organizational Commitment	Less than 5 years	3.350	0.019	52.11	Not tested	Not tested
	6-10 years			56.35		
	11-20 years			55.31		
	More than 21 years			51.75		

#### 4.3.5 Correlation analysis of job satisfaction and organizational commitment

The results of the correlation analysis between the three dimensions of job satisfaction (intra-organizational factors, outcome factors and personal factors) and the three dimensions of organizational commitment (sustained commitment, normative commitment and emotional commitment) for the employees of Company M are shown in Table 4.6.



Table 4.6 Correlation between job satisfaction and various dimensions of organizational commitment

		Internal organizational factors	Outcome factors	Personal Factors	Continuos Commitment	Specifica tion Commitment	Emotion Commitment
Internal organizational factors	Pearson	1	0.480*	0.480**	-0.444**	0.442**	0.436**
	Sig		0.000	0.000	0.000	0.000	0.000
	N	406	406	406	406	406	406
Outcome factors	Pearson	0.480**	1	0.330**	-0.378**	0.244**	0.243**
	Sig	0.000		0.000	0.000	0.000	0.000
	N	406	406	406	406	406	406
Personal Factors	Pearson	0.480**	0.330*	1	-0.307**	0.264**	0.235**
	Sig	0.000	0.000		0.000	0.000	0.000
	N	406	406	406	406	406	406
Continuos Commitment	Pearson	-0.444**	-0.378*	-0.307**	1	-0.323**	-0.247**
	Sig	0.000	0.000	0.000		0.000	.000
	N	406	406	406	406	406	406
Specificat ion Commitment	Pearson	0.442**	0.244*	0.264**	-0.323**	1	0.295**
	Sig	0.000	0.000	0.000	0.000		0.000
	N	406	406	406	406	406	406
Emotion Commitment	Pearson	0.436**	0.243*	0.235**	-0.247**	0.295**	1
	Sig	0.000	0.000	0.000	.000	0.000	
	N	406	406	406	406	406	406

\*\* . Significant correlation at the 0.01 level (two-tailed).

According to the results of the correlation analysis of job satisfaction and organizational commitment in Tables 4.6 above: where the dimension of sustained commitment is reverse scored, so the test results of sustained commitment and each dimension of job satisfaction are negatively correlated, so it can be said that each dimension of job satisfaction is positively correlated with sustained commitment. That is, there is a significant positive correlation between all dimensions of job satisfaction and all dimensions of organizational commitment.

(1) The intra-organizational factor is significantly positively related to the outcome factor ( $r=0.480^{**}, P<0.01$ ); the intra-organizational factor is significantly positively related to the personal factor ( $r=0.480^{**}, P<0.01$ ); the intra-organizational contextual factor is significantly negatively related to the sustained commitment ( $r=-0.444^{**}, P<0.01$ ); the intra-organizational contextual factor is significantly positively related to the normative commitment ( $r=0.442^{**}, P<0.01$ ) significantly positively correlated; intra-organizational contextual factors on affective commitment ( $r=0.436^{**}, P<0.01$ ) significantly positively correlated.

(2) Outcome factors in job satisfaction were significantly positively related to intra-organizational contextual factors ( $r=0.480^{**}, P<0.01$ ); outcome factors were significantly positively related to personal factors ( $r=0.330^{**}, P<0.01$ ); outcome factors were significantly negatively related to sustained commitment ( $r=-0.378^{**}, P<0.01$ ); outcome factors were significantly positively related to normative commitment ( $r=0.244^{**}, P<0.01$ ) significantly positively correlated; outcome factors significantly positively correlated to affective commitment ( $r=0.243^{**}, P<0.01$ ).

(3) Personal factors in job satisfaction were significantly positively related to intra-organizational contextual factors ( $r=0.480^{**}, P<0.01$ ); personal factors were significantly positively related to outcome factors ( $r=0.330^{**}, P<0.01$ ); personal factors were significantly negatively related to sustained commitment ( $r=-0.307^{**}, P<0.01$ ); personal factors were significantly positively related to normative commitment ( $r=0.264^{**}, P<0.01$ ) significantly positively correlated; personal factor on affective commitment ( $r=0.235^{**}, P<0.01$ ) significantly positively correlated.

#### **4.3.6 Regression analysis**

Regression analysis is based on correlation analysis and then describes exactly the specific relationship between the two variables. The previous study and analysis of the correlation between the variables showed that there is a strong positive correlation between the dimensions of job satisfaction and organizational commitment. In order to further determine the quantitative relationship between the interdependence of each dimension of the variables, therefore, further regression analysis is needed to verify the degree of intrinsic influence. In this subsection, a multiple regression analysis will be conducted for each dimension of the two variables of job satisfaction and organizational commitment. Before conducting regression analysis on the variables, we will make sure that the data of the collected variables do not have basic assumptions such as multicollinearity, heteroscedasticity, and serial correlation, and that the data are obeying positive-terms distribution. Based on the above factors, we will perform correlation tests on the data before regression analysis, which contain tests for multiple cointegration, variance orthogonality, etc. The tests for the regression analysis data and the regression methods used are shown below.

### (1) Multicollinearity verification

First of all, the absence of multicollinearity among the independent variables is an important prerequisite for multiple linear regression, which means that the independent variables cannot be highly correlated with each other (generally, a correlation coefficient of 0.7 or higher is considered highly correlated), and according to the results of the correlation analysis among the variables in Table 4-6 above, the correlation coefficients among the independent variables are all less than 0.5. The possibility of multicollinearity among the independent variables can be excluded. At the same time, the existence of multicollinearity can be determined by the magnitude of the tolerance and the magnitude of the variance inflation factor (VIF). The value of tolerance fluctuates from 0 to 1. If the value is close to 0, the higher the possibility of multicollinearity among independent variables. The variance inflation factor (VIF) is expressed as the reciprocal of the tolerance, and under normal circumstances, a VIF greater than 10 indicates the presence of multicollinearity among the independent variables. In this study, the values of tolerance and variance inflation factor were calculated simultaneously, and the test results showed that all the tolerances were far from zero, and the VIF was much smaller than 10. Therefore, it could be concluded that there was no multicollinearity among the independent variables.

### (2) Diagnosis of error terms

In addition to testing the data for multicollinearity before regression analysis, the validation of the error term diagnosis is also necessary for us to carry out multiple linear regression. The diagnosis of error terms, also known as serial correlation, refers to the possibility that the residual terms may be correlated after the regression analysis. In general, we will determine whether there is serial correlation between variables with the help of DW (Durbin-Watson) statistics. If the error terms are not independent, any estimation and hypothetical conclusion of the regression model is not reliable, and the value of DW generally takes a range between 0 and 4. That is, when the value of DW statistic fluctuates around 2, it means that there is no serial correlation between variables. The DW value obtained from the regression analysis using the sample data used in this paper is much less than 2, so the possibility of serial correlation can be ruled out.

### (3) Positive variance test

After the multicollinearity and error term diagnostic tests, the normality of the variance of the data needs to be tested. There are many ways to test for variance normality, and the simplest and most intuitive methods are histograms and scatter plots of the residuals.

The histogram and scatter plot use the residual term data of the model results in the regression analysis. The icon shows that the histogram and scatter plot show a uniform distribution in the area around the trend line, which indicates that the possibility

of heteroskedasticity in the model is low and the data generally show the characteristics of an approximately normal distribution.

(4) Regression analysis method

Usually, in the selection of regression analysis, multiple regression analysis is divided into explanatory regression analysis and predictive regression analysis according to the purpose of the study. In this study, we focus on the strength of the explanatory power of the variables involved in the theoretical model and the magnitude of the effects of the independent variables, so the explanatory regression analysis is more applicable. And this study uses a stepwise regression approach to regress the variables between job satisfaction and each dimension of organizational commitment.

**4.3.7 Regression analysis of each dimension of job satisfaction and organizational commitment**

(1) Regression analysis of continuous commitment on each dimension of job satisfaction

Table 4.7 Regression analysis of continuous commitment on each dimension of job satisfaction

Models		Beta	t	Sig	R <sup>2</sup>	Adjustment R <sup>2</sup>	F	Sig
1	Constants	-	22.143	0.000	0.197	0.195	99.262	0.000 <sup>b</sup>
	Organizational internal contextual factors	0.444	9.963	0.000				
2	Constants	-	21.848	0.000	0.233	0.229	61.049	0.000 <sup>c</sup>
	Organizational internal contextual factors	0.341	6.862	0.000				
	Resultant Factors	0.214	4.305	0.000				
DW	2.104							
tolerances	0.770							
VIF	1.299							
Dependent variable: ongoing commitment								

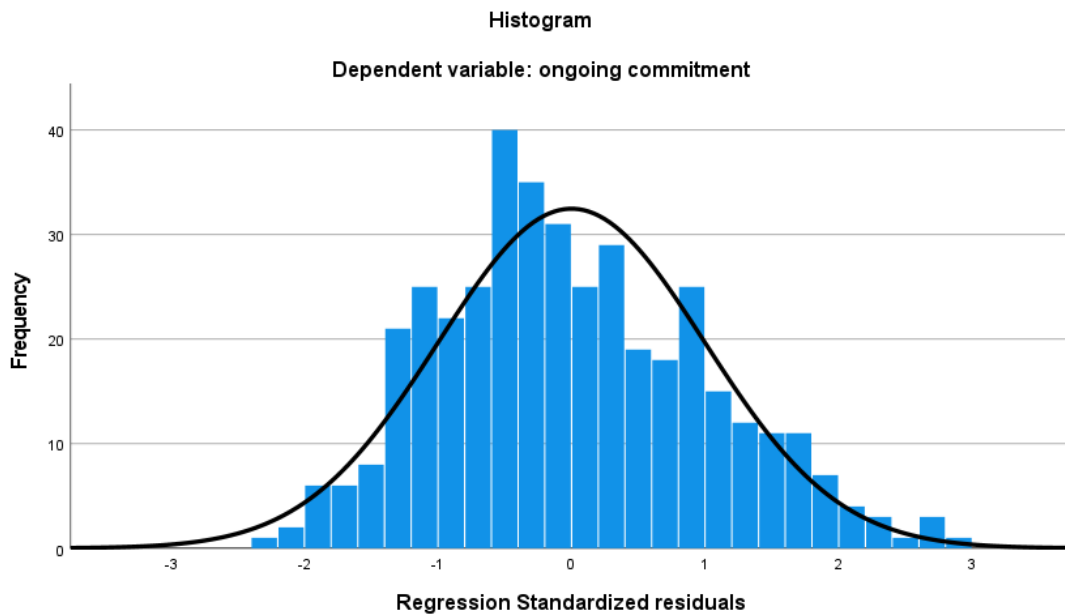


Figure 4.5 Histogram of regression analysis of sustained commitment and job satisfaction

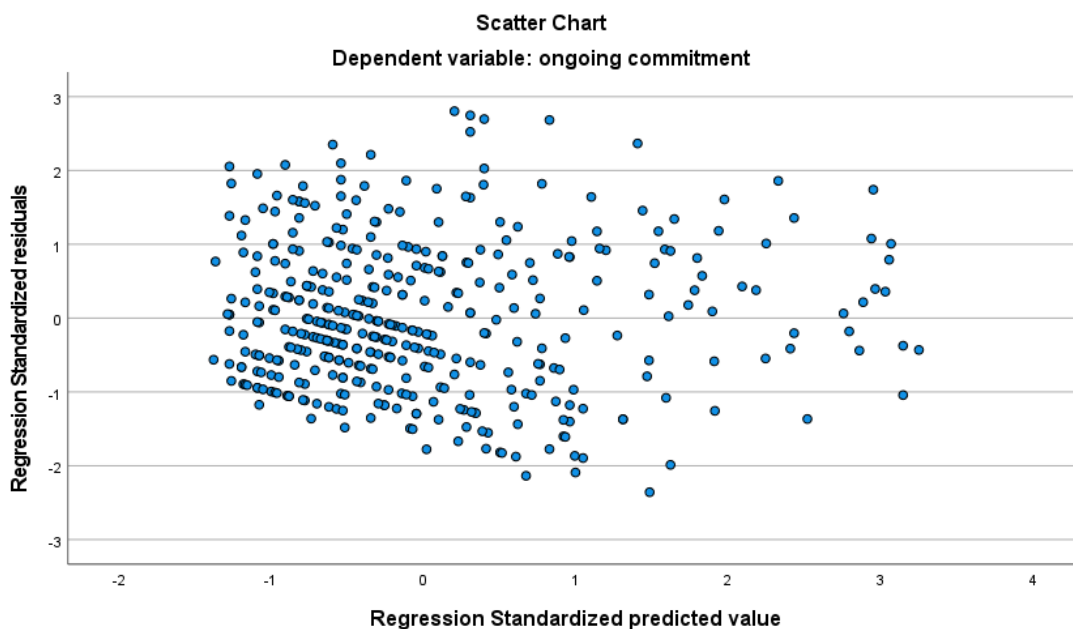


Figure 4.6 Scatterplot of regression analysis of sustained commitment and job satisfaction

According to the above graphs, the results of multiple regression analysis with sustained commitment as the dependent variable and three dimensions of job satisfaction (intra-organizational contextual factors, outcome factors and personal factors) as independent variables showed that only intra-organizational contextual

factors and outcome factors among the three dimensions of job satisfaction entered the regression model, while personal factors in job satisfaction were not significant with sustained commitment and were therefore excluded. As shown in Table 4.7, the DW value is 2.104, which indicates that the possibility of serial correlation is low; the tolerance is 0.770, which is much greater than 0; the maximum variance inflation factor (VIF) value is 1.299, which is much less than 10, which indicates that the regression results are valid and there is no phenomenon of multicollinearity; by observing and comparing the above Figure 4.1 and Figure 4.2, the residual values of sustained commitment and job The residual values of satisfaction can indicate that this sample is approximately normally distributed.

The intra-organizational situational factors entered the regression model first, with an adjusted R<sup>2</sup> of 0.195, an F-value of 99.262, and a p-value of 0.000 (p<0.01), indicating that the intra-organizational situational factors explained 19.5% of the sustained commitment; the beta coefficient was -0.444, indicating that the intra-organizational situational factors had a negative effect on sustained commitment; secondly, the model 2 outcome factors entered the regression model , with adjusted R<sup>2</sup> of 0.229, F-value of 61.049, and p-value of 0.000 (p<0.01), indicating that intra-organizational contextual factors and outcome factors jointly explain 22.9% of sustained commitment;  $\beta$ -coefficients of -0.341 and -0.214, respectively, indicate that intra-organizational contextual factors and outcome factors have a negative influence on sustained commitment. Since the continuance commitment dimension is reverse scored, based on the results of the above analysis, it can be verified that both intra-organizational contextual factors and outcome factors have a significant positive relationship on continuance commitment.

(2) Regression analysis of normative commitment on each dimension of job satisfaction

Table 4.8 Regression analysis of each dimension of normative commitment and job satisfaction

Models		Beta	t	Sig	R <sup>2</sup>	Adjustment R <sup>2</sup>	F	Sig
1	Constants	-	7.508	0.000	0.196	0.194	98.260	0.000 <sup>b</sup>
	Organizational internal contextual factors	0.442	9.913	0.000				
Dependent variable: normative commitment								

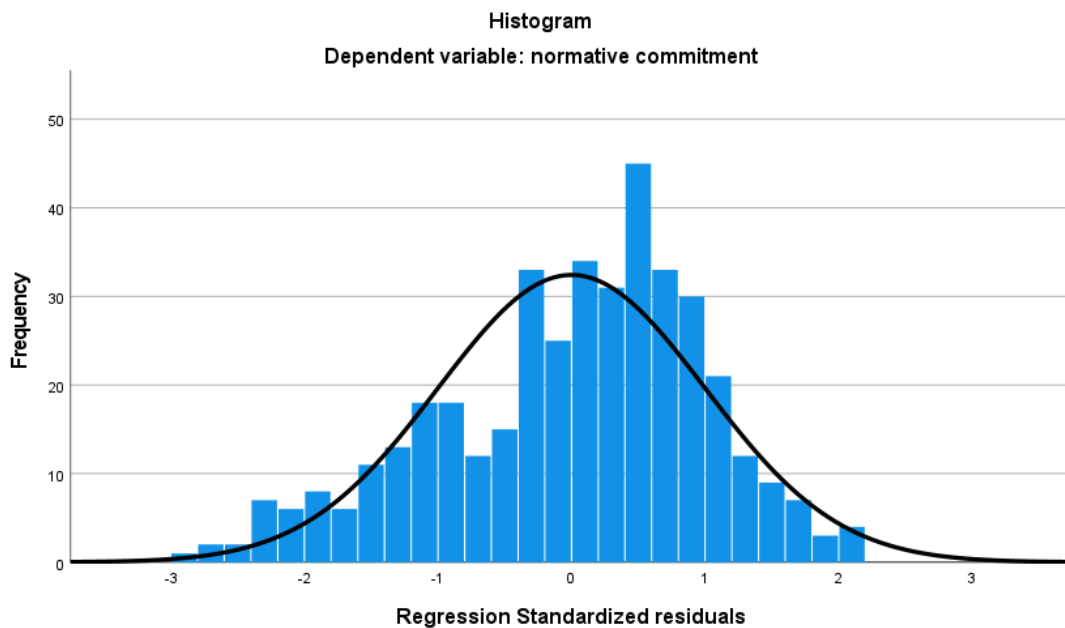


Figure 4.7 Histogram of regression analysis of normative commitment and job satisfaction

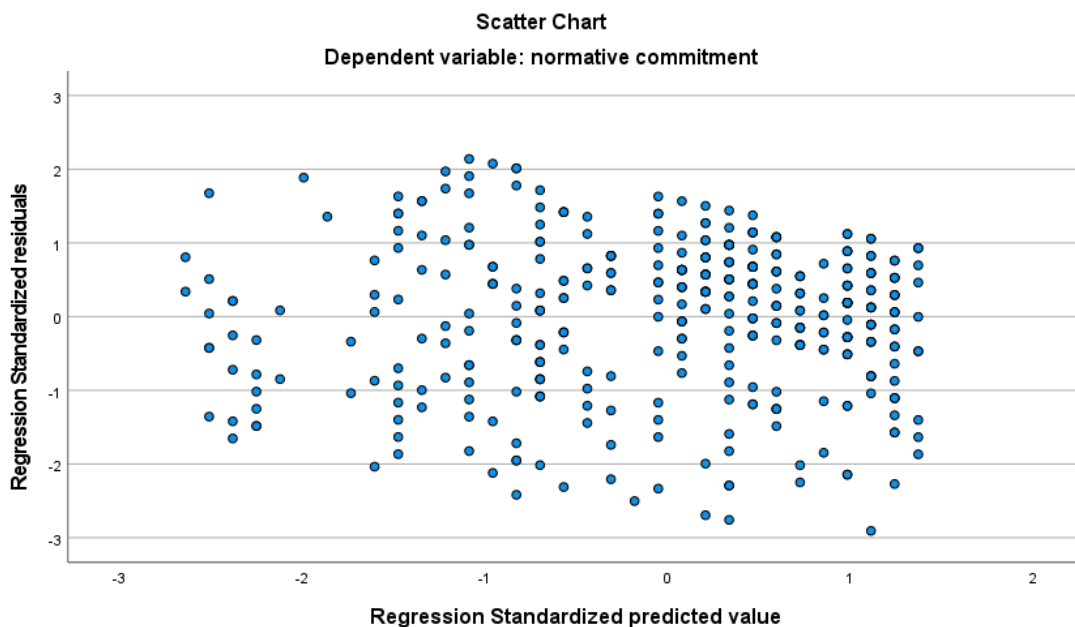


Figure 4.8 Scatterplot of regression analysis of normative commitment and job satisfaction

According to the results of the multiple regression analysis with normative commitment as the dependent variable and the three dimensions of job satisfaction (intra-organizational contextual factors, outcome factors, and personal factors) as independent variables shown in Tables 4.8 above, only the intra-organizational contextual factors among the three dimensions of job satisfaction entered the regression

model, while the outcome factors and personal factors in job satisfaction and the normative commitment in organizational commitment were not significant and therefore were excluded from the regression model. A comparison of the residual values of normative commitment and job satisfaction in Figure 4.3 and Figure 4.4 above shows that this sample is approximately normally distributed.

The intra-organizational situational factors entered the regression model with an  $R^2$  of 0.196, an adjusted  $R^2$  of 0.194, an F-value of 98.260, and a p-value of 0.000 ( $p < 0.01$ ), indicating that the intra-organizational situational factors explained 19.4% of normative commitment; the beta coefficient was 0.442, indicating that the intra-organizational situational factors had a positive influence on normative commitment.

(3) Regression analysis of emotional commitment on each dimension of job satisfaction

Table 4.9 Regression analysis of the dimensions of emotional commitment and job satisfaction

Model s		Beta	t	Sig	$R^2$	Adjustment $R^2$	F	Sig
1	Constants	-	10.453	0.000	0.190	0.188	94.854	0.000 <sup>b</sup>
	Organizational internal contextual factors	0.436	9.739	0.000				

Dependent variable: emotional commitment

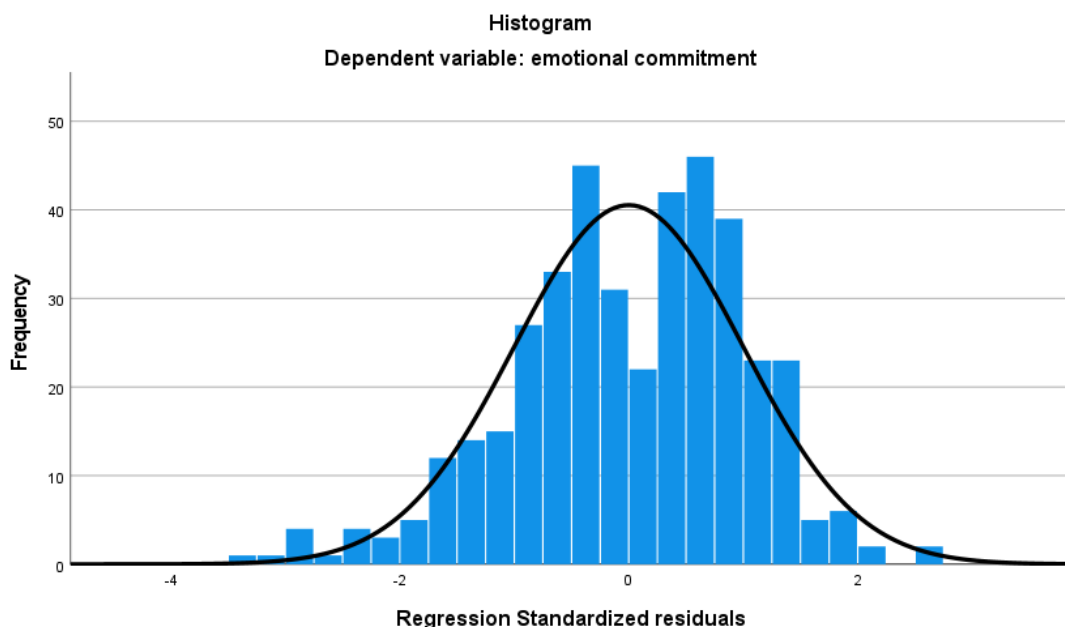




Figure 4.9 Histogram of regression analysis of emotional commitment and job satisfaction

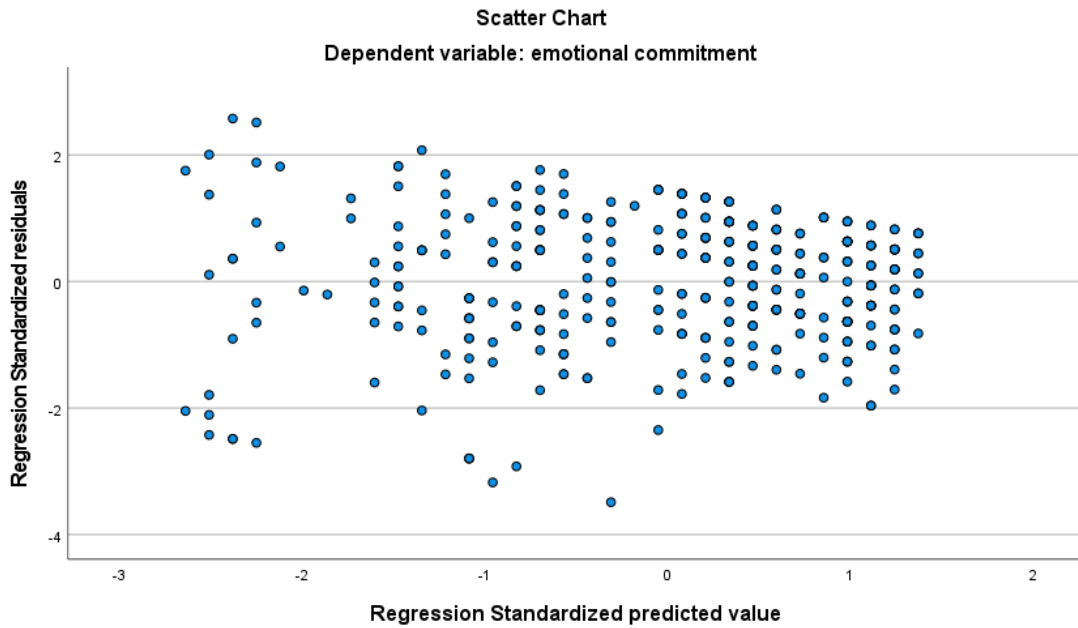


Figure 4.10 Scatterplot of regression analysis of emotional commitment and job satisfaction

According to the results of the multiple regression analysis with affective commitment as the dependent variable and the three dimensions of job satisfaction (intra-organizational contextual factors, outcome factors and personal factors) as the independent variables shown in Tables 4.9 above, only intra-organizational contextual factors entered the regression model among the three dimensions of job satisfaction, while outcome factors and personal factors were not significant with affective commitment in organizational commitment and therefore were excluded from the regression model. By comparing the residuals of affective commitment and job satisfaction in Figure 4.5 and Figure 4.6 above, we can see that this sample is approximately normally distributed. The intra-organizational situational factors entered the regression model with an  $R^2$  of 0.190, an adjusted  $R^2$  of 0.188, an F-value of 94.854, and a p-value of 0.000 ( $p < 0.01$ ), indicating that the intra-organizational situational factors explained 18.8% of affective commitment; the beta coefficient was 0.436, indicating that the intra-organizational situational factors had a positive effect on normative commitment.

In summary, the data sharing results show that: job satisfaction of SOE employees has a significant positive effect on organizational commitment, hypothesis H2 holds; each dimension of job satisfaction has a significant positive effect on each dimension of organizational commitment partially, hypothesis H2a partially holds; there is no

mean difference between job satisfaction and organizational commitment of SOE employees in demographic variables such as gender, age and education level, hypothesis H1 is not valid. This also fully illustrates the current situation and characteristics of employees in SOEs under the special system of SOEs at the moment. Job satisfaction and organizational commitment of SOE employees are predictive, and the research hypothesis H3 holds. The study also found that organizational internal factors have a greater influence on organizational commitment among the dimensions of job satisfaction, both in terms of employees' continuous commitment to the organization, normative commitment and emotional commitment; therefore, good job satisfaction of employees can effectively promote employees' organizational commitment and thus improve employees' sense of belonging to the organization.

## Chapter 5 Conclusion and Recommendation

### 5.1 Introduction

The main content of this chapter is to review whether the data results of this paper verify the research hypothesis of this paper, and to systematically analyze and describe whether the research results and the research hypothesis are valid or not, and to provide theoretical basis and reference for the subsequent research of scholars. In addition, the research results are discussed, the focus of employee satisfaction in State-owned enterprises and the fundamental needs of individual employees are analyzed in depth, and rationalized suggestions are given to the relevant departments of human resources in State-owned enterprises. Insights are provided on the shortcomings in the research process of this paper as well as on the reference directions for future research.

### 5.2 Conclusion

Table 5.1 Summary of study findings

Research Hypothesis	Study results
H1: There are significant differences in the demographic variables of job satisfaction and organizational commitment among employees of state-owned enterprises in terms of gender, age and education level.	Not Established
H2: Job satisfaction of employees in SOEs has a significant positive effect on organizational commitment	Established
H2a: All dimensions of job satisfaction of employees in state-owned enterprises have a significant positive effect on all dimensions of organizational commitment	Partially established
H3: Job satisfaction and organizational commitment of employees in state-owned enterprises are predictive	Established

This study takes employees of Chinese State-owned enterprises as the target population of this study. After reading and organizing the relevant literature from international scholars, we put forward the corresponding theoretical hypotheses and further constructed a theoretical model between employees' job satisfaction and organizational commitment. A mature scale with high reliability and validity, which is commonly used by international scholars, was used to obtain the data for this survey. The reliability and validity of the selected scale were further tested to ensure the reliability and validity of the questionnaire, and factor analysis was used to verify the

suitability of the theoretical dimensional classification of the research variables. On this basis, independent sample t-test, one-way analysis of variance, correlation analysis and regression analysis were conducted with the help of SPSS27.0.1 software to test the research hypotheses proposed in this paper. The following conclusions were obtained.

(1) Based on the results of factor analysis, this paper concludes that the job satisfaction of State-owned enterprises employees can be divided into three dimensions: intra-organizational contextual factors, outcome factors and personal factors; and organizational commitment can be divided into three dimensions: sustained commitment, normative commitment and affective commitment. Although, there are also a large number of scholars in the academic field whose research results divide job satisfaction and organizational commitment into different dimensions for investigation. The main reason for this is caused by the different perspectives and research objects of the study. In this paper, based on the actual research results and the theoretical results of other scholars, the above classification is made and its applicability is verified in the special population of State-owned enterprises employees.

(2) The results of the correlation analysis, regression coefficients and their significance levels of job satisfaction and organizational commitment show that job satisfaction of employees in State-owned enterprises has a significant positive influence on organizational commitment.

The results of the regression analysis of the dimensions of job satisfaction of State-owned enterprises employees on the dimensions of organizational commitment show that the magnitude of the influence of the dimensions of job satisfaction on the dimensions of organizational commitment varies, and the positive correlation of some dimensions is significant. Among them, the effect of intra-organizational contextual factors in job satisfaction on organizational commitment dimensions is greater than that of outcome factors and personal factors, which also further indicates that improving State-owned enterprises employees' satisfaction with intra-organizational contextual factors is more effective in promoting organizational commitment.

(3) The results of the tests on the basic information of the employees' gender, age, education and working years in State-owned enterprises show that the perceived levels of job satisfaction and organizational commitment in State-owned enterprises are not significant in terms of the employees' gender, age, education and working years. Some of these data were tested with unequal variance tests, and then further test analysis could not be done. The reason for this is that, on the one hand, it is possible that the special characteristics of the State-owned enterprises system have had a subtle convergent effect on the employees over time, making the perceived levels of gender, age, education, and years of experience insignificant. On the other hand, it may be that in

the process of sample collection in this study, the number of samples was small and the scope of selection was single resulting in the lack of generalizability and applicability of the research results.

### **5.3 Discussion**

In the course of this study, given the special system of Chinese State-owned enterprises and the characteristics of their employees, the focus of attention has been on how to strengthen the bonding of employees within the organization, enhance the sense of belonging of the organization's employees, and thus promote the autonomy of the organization's employees and their own degree of motivation. The employees of State-owned enterprises are mostly grassroots employees, but they are closely related to the normal operation and management of the enterprise and are an important part of the normal operation of the enterprise. Therefore, it is necessary to study the job satisfaction and organizational commitment of employees in State-owned enterprises.

In the course of this paper, it was found in the survey of employee job satisfaction and organizational commitment in State-owned enterprises that the degree of correlation between the various dimensions of employee job satisfaction and the various dimensions of organizational commitment was not very high and their perceived levels on the demographic traits of individual employees were not significant. The reasons for this are the insufficient sample size and the single scope of the study, which is not representative of the generality of the study. Whether this is due to the contextual bias in the selection of questionnaires for both variables in the Chinese context needs to be further investigated. Therefore, in this paper, the author believes that further investigation is needed in the selection of the questionnaire, the sampling process and the subsequent analysis of the study, and it is necessary to review and summarize the literature of related scholars. This would be more scientific and generalizable for the research results.

### **5.4 Recommendation**

With the rapid development of economic globalization, the market economy is increasingly active. For the cultivation of human resources of State-owned enterprises and the consolidation and development of corporate performance goals, which effectively promote the innovative development of market-oriented economic reform, the development of the employees' connectivity with the organization and the ability of independent innovation in State-owned enterprises not only affects the long-term development of the enterprise, but also indirectly affects the national image of the enterprise and the active degree of employees and the good development of their personal values. Based on the above analysis and results of this empirical study, the

following recommendations are made to improve the level of human resource management in State-owned enterprises and to increase their employees' organizational commitment.

(1) Focus on cultivating the initiative of enterprise employees

At present, the relationship between employees and enterprises in State-owned enterprises is still in the state of eating pot-luck rice, but this relationship does not have the concept that employees of State-owned enterprises before the reform and opening up are cognizant of the same root and the same body, nor the concept that employees of modern enterprises are cognizant of the enterprise as "bosses and workers". But for the employees of State-owned enterprises today, the implementation of a single standard has to a certain extent curbed the innovation of enterprise talents and gradually lost the core advantage of enterprises in the global market competition. Therefore, in the process of development, State-owned enterprises should adjust the solidified human resource management measures, improve and enhance the charter of human resource management, and establish a "people-oriented" concept of enterprise development. Establish a win-win development model in which the enterprise grows together with its employees and customers. Establish a virtuous cycle system to stimulate the personal potential and creativity of employees to a greater extent. Help employees to establish their own long-term career planning, so that they have a clear goal to move forward in the development of the organization. Encourage employees' innovation and development, and give them opportunities for trial and error. Thus, we encourage employees and enterprises to grow together, so that employees can perceive their own value in the development of the organization and strengthen their connection with the organization, and then serve the enterprise and people better.

(2) Improve job satisfaction of employees

The empirical study found that job satisfaction of employees in State-owned enterprises is significantly and positively related to organizational commitment. Therefore, how to effectively improve the job satisfaction of employees is not only related to the individual well-being of employees in enterprises but also directly affects the improvement and enhancement of employees' commitment to the organization and organizational performance. The following suggestions are made to improve employee satisfaction.

① Improve job-related satisfaction

The positive correlation between organizational contextual factors and organizational commitment dimensions under the job satisfaction dimension in this study shows that in the past, in order to improve the efficiency of projects, the same employees were often assigned to use the same similar methods or to do similar projects, and this practice of the organization can help to improve the efficiency of internal

projects to a certain extent, but In the long run, the repetitive work will lead to fatigue, boredom and boredom, and the employees' own development will also be limited. Therefore, for employees with certain foundation, different types of projects should be arranged for them. Therefore, for employees with certain foundation, they should be assigned different types of projects to improve their job satisfaction and make their overall development.

② Establish an effective incentive system

In State-owned enterprises, the compensation system for employees is set in strict accordance with certain regulations, and apart from the employees' basic salary, the degree of their performance is not much influenced by their compensation benefits. Therefore, linking their performance in the organization to their salary is the motivation for employees to be active and motivated. Companies can establish an open, fair and equitable employee incentive mechanism to promote the overall performance of the organization and the development of employee initiative. In this process, we must pay attention to the staff's compensation and reward, but also in the spirit of affirmation and care for the staff. Only then can the employees have a good positive attitude to work hard.

③ Emphasis on interpersonal relationship coordination within the organization

In the interpersonal communication within the organization, on the one hand, communication between superiors and subordinates should be appropriately enhanced. The leaders of State-owned enterprises should not only give relevant instructions but also care more about the personal happiness of employees, especially the grass-roots employees. For employees in the work and life difficulties to guide and help, to establish a good relationship between the upper and lower levels. On the other hand, effective interpersonal relationships should be established, not only in the process of work to the organization's internal members contact communication, but also in life to encourage good communication, in order to enhance the work of each employee in the enterprise communication and emotional communication.

④ Focus on the real needs of employees

In terms of organizational commitment, it represents, to a certain extent, not only the degree of employees' identification with the organizational culture, corporate mission and vision of the State-owned enterprises. It also represents the sense of belonging that employees feel in the process and their willingness to commit to the development of the company.

Based on the above, it can be understood that the degree of influence of outcome and personal factors on organizational commitment in the job satisfaction of employees in State-owned enterprises is small, except for the organizational internal contextual

factors. This is the problem that we need to focus on and solve. Therefore, on the one hand, companies should effectively and efficiently improve the neglect of outcome factors in the company, and examine the daily behavioral norms of employees while also focusing on the personal results and performance achieved by employees. For the personal factor, we should pay attention to the sense of achievement that individual employees perceive when creating their own value and devote to the achievement of their own goals and career development. By improving employees' personal satisfaction, we can combine personal goals with organizational goals. That is, individual employees who agree with the organizational goals will work with full enthusiasm and improve their job performance level. Improving employees' job satisfaction can be achieved by increasing their engagement and self-worth in their work within the organization.

Focus on the job satisfaction of employees and pay attention to their needs. The organization should try to understand the inner needs and thought dynamics of the employees as much as possible, and through regular communication or talks, grasp the basic situation about the employees' job satisfaction or organizational commitment, which helps to grasp their work attitudes and explain their current work status, and then target the guidance and development of the employees.

## **5.5 Further Study**

Based on the analysis of relevant theoretical studies and further reflection, the following aspects can be considered for future research by scholars.

(1) Expanding the sample size and sampling range of the sample within the role perspectives of different genders, stages of working years, and education, and then doing further validation work on the job satisfaction and organizational commitment of State-owned enterprises employees.

(2) A longitudinal study method can be used to explore the changes in variable data over a continuous period of time to explain the dynamic mechanism of action among the variables.

(3) Expanding the sample size and sample area by selecting a sample of State-owned enterprises employees from different geographic regions and different industries, and obtaining more objective data by means of a tripartite assessment of the respondents as leaders, colleagues and themselves.

(4) In this study, there is always a causal relationship in the process of asking questions, analyzing problems, formulating hypotheses and verifying their conclusions, while whether there are other mediating variables between employees' job satisfaction



and organizational commitment is not further explored and studied, which can be referred to in future studies in terms of research directions and research perspectives.

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## Appendix A Questionnaire

Dear Ms./Mr.

Hello! This is a questionnaire designed to study the relationship between job satisfaction and organizational commitment of employees in State-owned enterprises, and is to be filled in truthfully according to your actual situation. The information you fill out is for academic research purposes only. Personal information and unit information in the questionnaire will be kept strictly confidential, so you do not have to have any concerns. Once again, thank you for your support. Thank you for your participation and wish you a happy life.

The first part: please fill in your personal information

1. Your gender.

Male  Female

2. Your age.

Under 30 years old  31-40 years old  41-50 years  Over 51 years old

3. Education

Below bachelor's degree  Undergraduate  Master's Degree  PhD

4. Years of work in this unit.

Less than 5 years  6-10 years  11-20 years  More than 21 years

The second part: please fill out according to your personal situation

Table A-1 Job Satisfaction Scale

Question item	Rating Level				
	1	2	3	4	5
A1 has the opportunity to take things his own way	1	2	3	4	5
A2 has a sense of respect because of my work	1	2	3	4	5
A3 is satisfied with the way the company is currently implementing the policy	1	2	3	4	5
A4 Satisfied with the way superiors make decisions	1	2	3	4	5
A5 Good work performance will be praised by superiors	1	2	3	4	5
A6 Good work performance will be praised by colleagues	1	2	3	4	5
A7 can get a sense of accomplishment from the work	1	2	3	4	5
A8 I was satisfied with the way I was treated by my superiors	1	2	3	4	5
A9 The current working environment of the company makes me feel satisfied	1	2	3	4	5
A10 I get along well with my colleagues in the company	1	2	3	4	5
A11 I am able to give full play to my abilities in my work	1	2	3	4	5
A12 My job makes me feel secure about my future	1	2	3	4	5
A13 My current job gives me the opportunity to advance	1	2	3	4	5
A14 company will provide me with training opportunities	1	2	3	4	5
A15 I am satisfied with the salary of my current job	1	2	3	4	5
A16 My job gives me the opportunity to use my abilities	1	2	3	4	5
A17 In my work, I can use professional knowledge and judgment	1	2	3	4	5
A18 At work, I have the opportunity to serve others	1	2	3	4	5

Section 3: Please fill in the form according to your personal situation

Table A-2 Organizational Commitment Scale

Question item	Rating Level				
	1	2	3	4	5
B1 has a slight change in the current situation that would make me leave the company	1	2	3	4	5
B2 Even if you work at this company indefinitely, you won't get much out of it.	1	2	3	4	5
B3 If the work is similar, I am willing to work for another company	1	2	3	4	5
B4 It is my misfortune to have to work in this company	1	2	3	4	5
B5 I often have difficulty agreeing with important corporate policies regarding employees	1	2	3	4	5
B6 I rarely feel loyalty to this business	1	2	3	4	5
B7 I am willing to accept any job in order to stay with this company	1	2	3	4	5
B8 I told my friend this business is a good place to work	1	2	3	4	5
B9 For me, working in this company is better than in all other companies	1	2	3	4	5
B10 This company can really inspire me to work	1	2	3	4	5
B11 I find my values and the company's values are very similar	1	2	3	4	5
B12 I am very concerned about everything that happens in the business	1	2	3	4	5
B13 I am willing to put in twice as much effort to help this business succeed	1	2	3	4	5
B14 I am very happy to work for this company	1	2	3	4	5
B15 I am proud to tell people I work in this business	1	2	3	4	5