Impact of Employee Loyalty on Employee Performance: Empirical Evidence from Chinese Pharmaceutical Industry[†]

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Abstract

This research takes the pharmaceutical enterprises in Henan Province as the research to explore employee and examine the impact employee loyalty on employee performance as the research method for the relationship between employee loyalty and employee work performance. A questionnaire, using descriptive statistics, multiple regression analysis, and the main indicator that: Employee behavior loyalty has a significant positive promotion effect on employee performance. Employee attitude and loyalty has a significant positive effect on employee performance. The comprehensive loyalty of employees has a significant positive effect on employee performance.

Keywords: Pharmaceutical enterprise, Employee performance, Employee loyalty

Introduction

Pharmaceutical industry is an important part of China's national economy. It is a combination of traditional and modern industries, and the primary, secondary and tertiary industries. Its main categories include: Chemical raw materials and preparations, Chinese medicinal materials, Traditional Chinese herbal medicine decoction pieces, Chinese patent medicine, antibiotics, biological products, biochemical drugs, radioactive drugs, medical devices, health materials, pharmaceutical machinery, pharmaceutical packaging materials and pharmaceutical commerce. He (2020), indicates that the pharmaceutical industry plays an important role in protecting and improving people's health, improving the quality of life, family planning, disaster relief and epidemic prevention, military combat readiness, and promoting economic development and social progress.

Demand of Pharmaceutical product rose during the COVID-19 pandemic, it is challenging to the industry to maintain the high loyalty of employees and create more value for enterprises has become a hot topic for scholars at home and abroad in recent years. In recent years, domestic scholars have been devoted to studying employee loyalty. There are many quantitative studies, but research on domain-specific employee loyalty is still in the early stages of exploration. This research explains the loyalty of enterprise employees and examine employee loyalty an employee performance Every year, a large number of enterprises recruit talents, and absorb a large number of talents to serve them. At the same time, the competition between the 2 companies is also fierce. With the economic situation and the ideology of the people, so is the loyalty of employees to the enterprise. How to retain highly loyal employees has become a concern for companies.

Research objectives

The purpose of this research is to get better understanding of China's pharmaceutical industry, particularly on relationship between employee loyalty and employee performance, is as follows:

1. Explore the loyalty of Chinese employees in the pharmaceutical industry

By reading and summarizing the conclusions, this research understands the performance of employee loyalty and the important factors affecting employee loyalty. Taking the pharmaceutical industry as the typical research, deeply investigate the development status of China's pharmaceutical industry, comprehensively study employee loyalty, understand the specific reasons of the pharmaceutical industry, affect employee loyalty, analyze the impact of employee loyalty on the development of the pharmaceutical industry, and can put forward corresponding solutions.

1) Employee Rights

Employee rights and interests are divided into 3 categories: Power rights, interests rights, psychological rights and interests. Power equity refers to the belief that power is a special influence between people or an enterprise. It has diverse origins, such as individual characteristics, position in the enterprise, professional skills, control of resources or social influence, etc., and can ultimately change the behavior of an individual or a group. Interests and interests refer to the benefits that employees can obtain directly from the production process through physical or mental labor. The interests we define here are mainly based on the explicit benefits obtained that can be directly measured, such as employee salary, stock, options, annuity, etc. Psychological rights and interests are defined as the content and needs of the rights and interests that the employees should fully enjoy and can be fully accepted and respected by the society and enterprises in the process of enterprise development and reform. The psychological rights and interests needs of employees of central enterprises who desire to be met in spiritual, psychological and emotional aspects mainly include: Safe working environment, being fully respected and understood, being accepted by the collective and having good interpersonal relationship, value creation and realization, sacrifice and sacrifice, etc.Employee loyalty mainly starts from the level of their psychological rights and interests, reflecting their psychological loyalty and the acquisition of employees' comprehensive rights and interests.

2. The impact of employee royalties on employee performance in the pharmaceutical industry

Employee royalties is taken as a behavior strategy to improve employee enterprise loyalty, the daily behavior of employees is deeply analyzed, the impact of cost on employee loyalty is effectively analyzed, and the impact of employee royalties on employee performance in the pharmaceutical industry is determined.

There is less research about the interaction between employee loyalty and work performance at home and abroad. explains that organizational commitment is work attitude. Organizational commitment is not only the embodiment of employees 'values and incentives, but also the expression of employees' organizational feelings and loyalty, so it can have a great impact on work enthusiasm and work efficiency. found that increasing their job satisfaction can not only enhance their loyalty to the organization, but also effectively enhance their work efficiency; unfortunately, improve their job satisfaction and do something unrelated to the enterprise after completing their job. believes that employee loyalty is a critical indicator for an enterprise to measure its human resource management technology; the lower the employee loyalty enterprise turnover rate, which is related to a long-term effective growth and growth, so attention must be paid to further enhancing the overall performance of the whole enterprise level by enhancing employee loyalty. Zhang (2018) took the new generation of employees as the research object, and the empirical analysis shows that employee loyalty as the intermediary variable not only has a significant intermediary effect, but also has a significant positive promotion effect on individual work performance. These literature all confirms that employee loyalty has an important intermediary role, such as the mediation role between transformative leadership and total work performance, and the intermediary transmission effect of knowledge sharing on job performance.

Literature review

Introduction to the development of the pharmaceutical industry in china

Although China's pharmaceutical industry is developing rapidly and has relatively high-quality development resources, there are still some deficiencies. Pharmaceutical industry belongs to the type of high technology industry, need continuous science and technology innovation to achieve, China's

pharmaceutical industry and the United States, Japan, South Korea and other developed countries, the main reason is that national investment in pharmaceutical industry is less, cannot provide enough financial support for science and technology development, China's pharmaceutical industry investment only 1.6 % of the total output, the United States and Britain is 23.63 % and 24 respectively. At 92 %, the pharmaceutical industry does not have enough power supply. Second, the industry concentration of pharmaceutical enterprises is low, most of the pharmaceutical enterprises are scattered, our annual sales and sales of large foreign pharmaceutical enterprises, the industry concentration is low, so we cannot provide strength support for the pharmaceutical industry, which limits the development and progress of the pharmaceutical industry. The sense of cooperation among enterprises is not strong, the internal digestion ability of high-quality resources is not strong, the lack of communication between industries, and failed to form a healthy competition relationship of strong alliance.

At present, China's pharmaceutical industry has formed a relatively complete industrial system, and the industry as a whole is still in the stage of sustainable development. With the improvement of Chinese residents' health awareness and payment ability and the progress of biomedical technology, China's pharmaceutical industry will also enter a different stage of development. The previous business model relying on low price and low cost and high sales cost investment has been difficult for pharmaceutical enterprises to obtain a stable market competitive advantage, and the r&d and innovation ability will become a new core driving force for pharmaceutical enterprises to seize the market under the new form. Due to the growth of China's medical expenses has gradually exceeded the growth of health insurance fund, lead to China health insurance funds pressure increases, so in order to ease the pressure of health insurance fund, health insurance control related policy, and supporting drug bidding collection measures also continue to promote, reduce drug prices and reduce hospital drug ratio has become the inevitable trend of industry development. Therefore, it is difficult for pharmaceutical enterprises to rely on increasing sales investment to maintain their performance. How to improve their technical level and product quality through research and development and innovation has become the only way for pharmaceutical enterprises to seek new development. In order to realize the improvement of enterprise performance, it is necessary to retain excellent talents and improve the work performance of employees by constantly improving the relationship between employees and the enterprise. The characteristics of pharmaceutical employees are mainly reflected in: Employees aged 35 - 45; education in college and undergraduate levels; front-line employees and some sales staff high mobility. In recent years, scholars at home and abroad have found a significant positive correlation between psychological capital and work performance. This study expects to analyze the relationship between the loyalty and performance of pharmaceutical enterprise employees, so as to provide a scientific basis for human resource management for enterprise managers

Employee loyalty

Employee loyalty can effectively reduce the cost in the process of frequent flow, such as the time cost content of enterprises in the recruitment, skill training and improvement links, as well as in the docking process before and after work, which is not conducive to the normal progress of the project, causing certain confusion to the enterprise management. Therefore, in order to accurately grasp the level of employee loyalty to the company, Laura Rif kin conducted a visual analysis of employee loyalty during the research process, and studied from multiple perspectives, providing strong data support for the development of the enterprise. Based on employee balance sheets and value flow reports, comprehensive data analysis enables further understanding of employee loyalty. These 2 data contents also provide systematic research tools to fully understand competitor employee loyalty and adjust their development strategies. The author believes that this method of measuring employee loyalty is scientific and reasonable, also by intuitively shows the recent business development, understand the psychological state, also indirectly reflects the employee loyalty and personal work performance, with more diversified data, effectively established the employee loyalty evaluation model, provides strong support for the development of the enterprise.

Li (2017) believes that employee loyalty is about providing value and services for new projects, which is based on the relationship between employees and the organization. Employees contribute to the value of labor and complete the enterprise tasks, and get a certain remuneration from the enterprise. Employee

loyalty to the business is based on satisfactory pay, which is the result of the dynamic presentation. According loyalty can be divided into 2 types of discussion, namely corporate loyalty and professional loyalty, and the authors agree. Corporate loyalty is more specific, that is, employees have a higher sense of achievement, self-worth and satisfaction with the work results, provide a deeper sense of dependence and a working platform belonging to the enterprise, and consciously establish the ownership of positions and tasks. I want to devote all my energy and time to the sense of accomplishment and personal value that the company creates, but the employees can't easily ask to leave. The author believes that professional loyalty and corporate loyalty complement each other. Diversified analysis from the individual perspective and enterprise perspective can better and comprehensively interpret the content of loyalty, and have a deeper understanding of the loyalty of employees. For example, concluded through extensive research that the reasons for employee loyalty are more diverse, mainly including the working environment, including salary, training and personal interests, corporate objective factors and personal subjective factors, involving employee loyalty.

Domestic and foreign scholars study the relationship between employee loyalty and personal work performance. The first to propose the concept of loyalty is Harvard Professor Royce, in the book, the philosophy of loyalty, loyalty is a more systematic hierarchical structure that can be graded, at the bottom of individual loyalty, then to group loyalty, loyalty is built on social or corporate values and selfless dedication principles. The study explains that loyalty to individuals can be loyalty to their direct leadership; loyalty to groups can be expressed as loyalty to organizations, such as loyalty to companies; and full dedication to values and principles is the pursuit of certain beliefs or social values.

To study the factors affecting employee loyalty, Becker believes that individual employee factors have a great impact on employee loyalty, and the longer they work in the company, the higher the departure costs and the greater the corporate loyalty. sthene. Ehrlich said their gender, age and marital status are also more loyal to the company, and the older their employees, the more stable the marriage, the more loyalty. believes that there is a positive correlation between corporate brand image and employee loyalty. Costen and Salazar believe that the training provided by enterprises for employees can also affect employee loyalty, and that scientific, reasonable and effective training can improve employee loyalty. Kumar and concluded from a large sample survey that there was a positive relationship between employee loyalty and personal work performance. Zhao wei's empirical analysis also concluded that the more loyal employees are to the company and the position they are in, the better they perform. In the process of operation, enterprises can effectively improve the loyalty of employees to the enterprise, reduce the employee turnover rate and improve employee performance by increasing the number of employee work training, increasing employee promotion, salary increase opportunities, platform and other platforms. believes that the employee loyalty level can directly reflect the level of human resource management of enterprises. The higher the loyalty, the lower the turnover rate, the better the overall work effect of the enterprise.

The Abdullah et al. (2021) said that private hospital employee loyalty performance during the COVID-19 outbreak was severely affected by strict work needs and work-family conflicts. To address this problem, social and psychological rewards play a mediator. Ansari (2021), believes that employee loyalty should be seen as a valuable asset in the organization to improve the internal performance and build better relationships with customers and suppliers.

Also believes that employee loyalty should be seen as a valuable asset in the organization to improve the company's internal performance and build better relationships with customers and suppliers. Jean (2021), believes that employee loyalty to the organization depends on the social emotion and professional support of colleagues. However, these variables do not account for the organizational commitment of these employees.

Veloso et al. (2021) shows that if employees are satisfied with the company, this satisfaction makes positive and significant contributions to strengthening peripheral performance and their loyalty to the organization. At the same time, originality/value job satisfaction has an increasing interest in understanding quality of life, strategic management and organizational performance. Therefore, adopting a positive work attitude in organizing activities can help to improve their job satisfaction.

Vasumathi et al. (2021), others say that job satisfaction and employee loyalty are the most important factors on which any organization can survive and grow and achieve organizational success. Financial benefits, organizational commitment, and motivation are the loyalty factors used to discover the impact of organizational success. The researchers found that the important criteria for measuring job satisfaction were different. The researchers also analyzed a variety of important factors that determine employee loyalty, including current pay levels, job security, followed by appreciation.

Irawati et al. (2021), believes that employee productivity is closely related to their job loyalty and job satisfaction. Productivity may also be influenced by other factors, including training and organizational communication.

2) Classification of employee loyalty

Combined with the concept of employee loyalty, this research believes that employee loyalty can be divided into 2 categories, namely active loyalty and passive loyalty. Active loyalty is the expression of voluntary and active devotion; the passive loyalty is the loyalty forced by life and family, which is a kind of repression. In general, passive loyalty is mainly influenced by material aspects, showing a desire for higher material treatment. But if the constraints of passive loyalty are not established or individual, the loyalty relationship between employees and the organization will disappear. Passive loyalty is a kind of false loyalty, which will have many adverse effects on the long-term development of the enterprise, and should cause enough attention.

The Impact of employee loyalty on employee performance

Loyalty is one of the good qualities of the Chinese nation for 5 thousand years, and it is one of the core components of the traditional moral character. In a rapidly developing society, it is always a key factor in codes of conduct and effects on individual performance. Discussion and research on employee loyalty mainly explored the relationship between employees and the organization.

In the study of individual work performance, the author agrees with the view of comprehensive orientation theory. Comprehensive guidance theory believes that performance is a comprehensive consideration of employees' work behavior and work results, which should be comprehensively considered and defined through behavior and results. It is the specific work responsibility of employees in the work, and the enterprise hopes that employees can realize the unity of work results. There are many factors that affect employees' individual performance. If employees have better independent control in the enterprise, the higher the autonomy and freedom reflected in the job, the deeper the impact of personal ability and personal characteristics on job performance. Many scholars have noted that job performance has a profound impact on the personal characteristics of employees. Employees' personal learning ability, work attitude, work ability, understanding and absorption of knowledge, as well as communication and coordination with colleagues, are all closely related to performance. According to the author, employee personal performance research should not only evaluate the quantitative evaluation of personal work, but also make a comprehensive analysis of personal learning ability and surrounding performance, including work enthusiasm, organizational cooperation atmosphere and interpersonal processing factors of colleagues. concluded through extensive research that the reasons for employee loyalty are more diverse, with the main factors being working environment, including salary, training and personal interest, corporate objective factors and personal subjective factors, involving employee loyalty.

Domestic and foreign scholars study the relationship between employee loyalty and personal work performance. British scholars say that employee loyalty is positively correlated with personal work performance. Zhao wei's empirical analysis also concluded that the more loyal employees are to the company and the position they are in, the better they perform. In the process of operation, enterprises can effectively improve the loyalty of employees to the enterprise, reduce the employee turnover rate and improve employee performance by increasing the number of employee work training, increasing employee promotion, salary increase opportunities, platform and other platforms. Believes that the employee loyalty level can directly reflect the level of human resource management of enterprises. The higher the loyalty, the lower the turnover rate, the better the overall work effect of the enterprise.

With the development of the global economy and the changes of the internal and external environment, the concept of loyalty has been introduced into more fields and injected with more new connotations. As for employee loyalty, prospective stated that loyalty is closely related to business activities, and Clayton L was the first to introduce loyalty into economic management. After that, scholars basically divided employee loyalty into attitude loyalty, behavior loyalty and the combination of the 2 loyalty. However, this research believes that no matter which Angle of loyalty will be implemented in the end, so it is inevitable that employee loyalty is divided into attitude and behavior. Whether in sociological interpretation or in management interpretation, all people see the vital importance of loyalty, which is obtained after a long-term mutual game to maximize their interests. Nowadays, the connotation of loyalty has been injected by The Times and more connotation by wise scholars, but there has been no unified definition.

Through consulting the relevant literature in the past 3 years, in recent years, domestic and foreign scholars' research on employee loyalty mainly focuses on the influencing factors of employee loyalty and put forward theoretical suggestions on how to cultivate and maintain employee loyalty. Foreign scholar of loyalty and gratitude in contemporary business, that the employee is loyal to the employer from the provisions of the contract, so the contract as the primary factor, after the elements affect employee loyalty gradually transferred from the contract to relationship, that the employer for employee loyalty plays an important role, so emphasize the importance of personal relationship, maintain contact with employees, form replicable benign relationship. Through the application of hierarchical analysis method, and combined with the sunning specific case to affect the factors of the importance of employee loyalty, finally concluded that the key factors of employee loyalty, and combined with fair theory, demand theory, double factor theory for enterprises to cultivate employee loyalty.

This research believes that employee work performance is a comprehensive connotation of results, behavior and ability, that is, employee work performance is related to organizational goals under individual control, and can be evaluated according to individual ability. studied the relationship between organizational resources, knowledge sharing and work performance, and found that there was a significant positive relationship between organizational resources and knowledge sharing and work performance, thus providing a more comprehensive and in-depth reference for improving employees' work performance. It can be seen that scholars have carried out a lot of research on the influencing factors of employees' work performance from different perspectives, but the theoretical circle has not formed a unified influence model at present. However, according to the literature review, employee work performance is a multi-factor structure of measurable results, behaviors and processes, and is first all influenced by the organizational environment, psychological factors, personal characteristics and other factors.

Hypotheses development

This research mainly explores the influence of pharmaceutical enterprise employee loyalty on employee performance, including behavioral loyalty, attitude loyalty and overall loyalty; dependent variables include job performance timeliness, job quality, customer satisfaction and job process. Among them, employee behavior loyalty mainly refers to the contribution of employees to the enterprise in work and life. Behavioral loyalty will affect the work quality and work efficiency of employees in daily work, which is a short-term influencing factor, which is affected by employees' own status, working environment and many other factors, and its impact on customer satisfaction is at a shallow level. Employee attitude and loyalty mainly refers to that employees can give full play to their professional skills in the process of enterprise development and provide strong support for realizing the development goals of the enterprise. Employee attitude and loyalty is an important source of employees' work drive, and also an effective help to stimulate employees' subjective initiative, improve their work quality and improve the work process. Employee overall loyalty is the behavior and personal attitude loyalty to the enterprise is the true embodiment of employee loyalty. This view not only requires employees to show loyalty to the enterprise from their work behavior, but also to show strong loyalty to the enterprise from the perspective of attitude and emotional feelings. Full loyalty is the most important source of employees' sense of work achievement and self-efficacy. Based on this, the paper makes the following assumptions:

Hypothesis H1: Employee loyalty has a significant positive promotion effect on employee performance;

Suppose H1.1: Employee loyalty has a significant positive effect on employee timeliness;
Suppose H1.2: Employee loyalty has a significant positive effect on employee quality of work;
Suppose H1.3: Employee loyalty has a significant positive effect on customer satisfaction;
Suppose H1.4: Employee loyalty has a significant positive promotion effect on employee work process.

Research methods

This study mainly used the empirical research approach in a narrow sense. The narrow sense of the empirical research method mainly refers to the research method of analyzing the interaction between multiple factors by using the quantitative analysis technology. It is mainly reflected in the analysis and processing of the data obtained in the questionnaire survey, descriptive statistical analysis, reliability analysis, validity analysis and other operations.

Results and Discussion

Employee loyalty analysis

This research divides the employee loyalty of Chinese pharmaceutical enterprises into 3 dimensions, which are behavioral loyalty, attitude loyalty and overall loyalty, while employee loyalty mainly affects employee performance from 3 aspects: Task performance, context performance and adoption performance. Specific analysis is as follows:

Q6 - Q10 was designed to test the behavioral loyalty of the respondents. Higher scores indicate higher employee behavioral loyalty.

Table1 Descriptive statistics of behavioral loyalty.

	Average	Standard deviation	Perceived level
Q6 I always do the assigned work very well.	4.16	0.441	agree
Q7 During the process of my work, I can constantly try to improve the quality of my output.	4.27	0.385	Very much agree
Q8 I will tell people about the advantages of the company.	4.35	0.216	Very much agree
Q9 When I am asked to recommend a job, I recommend my company.	4.08	0.288	agree
Q10 I would warmly recommend this to my friends and family.	4.24	0.271	Very much agree
Average behavioral loyalty level	4.22	0.3202	Very much agree

Table 1 shows that when measuring the average level of respondent behavioral loyalty, respondents generally strongly agreed that the mean value for Q6 - Q10 was 4.22, indicating a high mean level of behavioral loyalty in the sample. Q8 had the highest average of 4.35 and a standard deviation of 0.216, indicating that respondents strongly agree that they were able to tell people the strengths of their companies. Q9 had the lowest mean of 4.08 and a standard deviation of 0.288, indicating that respondents agreed to recommend their own company when asked to recommend a job.

The Q11 - Q15 was designed to test the respondents' attitude loyalty. Higher scores indicate higher employee attitude loyalty.

Table 2 Descriptive statistics of attitude loyalty (n = 366).

	Average	Standard deviation	Perceived level
Q11 I keep thinking about what I can do to improve my current work.	4.29	0.280	Very much agree
Q12 I will be pleased to announce that I work for the current company.	3.72	0.754	agree
Q13 Even if other companies provide better compensation, I will not quit the company.	4.21	0.551	Very much agree
Q14 I finished my duties while having a very good attitude to my work.	4.10	0.420	agree
Q15 I have a clear career path in this company.	4.08	0.254	agree
Average attitude and loyalty level	4.08	0.4518	agree

Table 2 shows that respondents were found generally agreeing when measuring average attitude loyalty. The mean value of Q11 - Q15 was 4.08 and the standard deviation was 0.4518, indicating the high level of mean attitude loyalty in the sample. The Q11 has the highest average of 4.29 and a standard deviation of 0.280, indicating that respondents generally strongly agreed with "I am constantly thinking about what I can do to improve my current work". The Q12 had the lowest average of 3.72, indicating that respondents generally agreed that "I will be pleased to announce that I work for the current company" and that the standard deviation of 0.754 indicates the greater degree of discrete of the results. The Q16 - Q20 was designed to test the overall loyalty of the respondents. Higher scores indicate higher overall employee loyalty.

Table 3 Descriptive statistics for full loyalty.

	Average	Standard deviation	Perceived level
Q16 If the enterprise faces challenges, I will share these difficulties with the enterprise and never give up.	4.42	0.479	Very much agree
Q17 Even if other companies provide a better working environment.	4.36	0.187	Very much agree
Q18 I am very glad to be a part of this company.	4.84	0.206	Very much agree
Q19 My career development advance plan is consistent with the company's development goals.	4.65	0.221	Very much agree
Q20 I can get all the resources I need to work in the company.	3.98	0.219	agree
Average full loyalty level	4.45	0.2624	Very much agree

Table 3 shows that respondents generally strongly agreed as found when measuring average full loyalty. The mean value of Q16 - Q20 was 4.45 with a standard deviation of 0.2624, indicating a high level of mean overall loyalty in the sample. The average of Q18 and Q19 exceeded 4.60, and the standard deviation of both was below 0.23, indicating that respondents generally agreed that "I am glad to be a member of this company" and "my career advance planning is consistent with the company's development goals". The lowest average of Q20 is lowest at 3.98, which also shows that some respondents do not agree that "I can get all the resources I need to work in the company", which can also become a development direction for enterprises to improve the overall loyalty of employees in the future.

Q21 - Q30 was designed to test the task performance of respondent employee performance. Higher scores indicated better employee performance of the respondents.

Table 4 Descriptive statistics of Employee Performance (n = 366).

	Average	Standard deviation	Perceived level
Q21 I have rated the quality of my work over the past 3 months	3.91	0.648	agree
Q22 Compared with last year, I believe my labor volume has increased in the last 3 months.	4.47	0.352	Very much agree
Q23 I was able to schedule my work so that it was done on time	4.28	0.526	Very much agree
Q24 My plan is the best one.	3.65	0.420	agree
Q25 I keep in mind what I need to achieve in my work.	3.70	0.547	agree
Q26 I have worked very hard to complete my task	4.55	0.281	Very much agree
Q27 I have difficulty setting priorities in my work.	3.61	0.811	agree
Q28 I am able to distinguish the main and secondary issues at work	3.81	0.463	agree
Q29 I can complete my task in the required time.	4.38	0.755	Very much agree
Q30 I was able to complete my task with minimal effort.	3.74	0.835	agree
Average employee performance level	4.01	0.5638	agree

Table 4 shows that when testing the average employee performance level of the respondents, the results show an average of 4.01, indicating a generally high task performance for employee performance. Among them, the average value of Q22, Q23, Q26 and Q29 was higher than 4.20, and the average value of Q26 was the highest, reaching 4.55, which also shows that respondents generally agreed that "I have worked very hard to complete my task", and the good working attitude of employees is the basis of employee performance. Q27 had the lowest mean, being 3.61, compared to a higher standard deviation of 0.811.

The Q31 - Q40 is designed to test the contextual performance of the respondents' employee performance. Higher scores indicated better employee performance of the respondents.

Table 5 Contextual performance Descriptive statistics for employee performance.

	Average	Standard deviation	Perceived level
Q31 I have been able to fulfill my duty	4.10	0.342	agree
Q32 I took on the additional responsibility.	3.87	0.494	agree
Q33 I can undertake a challenging task if I have an opportunity.	3.84	0.332	agree
Q34 I can understand people very well when they tell me something.	4.18	0.280	agree
Q35 I try to keep it updated with my working knowledge.	3.51	0.534	agree
Q36 I came up with some creative ideas in my work	3.40	0.454	basically agree
Q37 When I have the problem to solve, I took the initiative	3.42	0.738	agree
Q38 I am actively looking for ways to improve my work performance	3.48	0.681	agree
Q39 I took on the challenging work tasks	3.32	0.640	basically agree
Q40 I know how to solve difficult situations and setbacks quickly	3.54	0.776	agree
Average employee performance level	3.62	0.5271	agree

Table 5 shows that when testing the average employee performance level of the respondents, the results showed a mean of 3.62 and a standard deviation of 0.5271, which indicates a relatively high task

performance for employee performance. Among them, only Q36 and Q39 are not higher than 3.40, which indicates that most employees basically agreed that "I came up with some ideas at work" and "I undertake challenging tasks". The average value of other items is between 3.41 and 4.10, which also indicates that respondents' employee performance is generally high.

The Q41 - Q45 was designed to test the contextual performance of the respondents' employee performance. Higher scores indicated better employee performance of the respondents.

Table 6 Descriptive performance statistics are used for employee performance.

	Average	Standard deviation	Perceived level
Q41 I try to keep it updated with my working knowledge	3.51	0.534	agree
Q42 I have shown the flexibility in my work	3.42	0.428	agree
Q43 I am able to cope well with situations and setbacks in difficult work	3.24	0.358	basically agree
Q44 After encountering difficult situations or setbacks in my work, I recovered quickly.	3.68	0.766	agree
Q45 I can come up with some creative solutions to new problems when I have difficulties at work	3.20	0.682	basically agree
Average employee performance level	3.41	0.5536	agree

Table 6 shows that when testing the average employee performance level of the respondents, the results show a mean value of 3.41 and a standard deviation of 0.5536, indicating that the adoption performance level of employee performance is overall high. Among them, the average of Q43 and Q45 is 3.24 and 3.20 respectively, which are less than 3.40, which shows that some respondents basically agreed that "I can cope with the situation and setbacks in difficult work" and "I can come up with some creative solutions to new problems in my work", which also provides a good reference for looking for improving employee performance in the future.

Hypothesis test results
Correlation analysis
This study used Pearson correlation analysis to analyze the significance of the degree of correlation between pairwise variables. If the correlation between the explanatory variable and the explained variable is significant, the relationship between the pairwise variables is good. The direction of correlation between pairwise variables is determined by the positive and negative value of the correlation coefficient. If the correlation coefficient is a positive value, it represents a positive correlation between pairwise variables, and if the correlation coefficient is a negative value, it represents a negative correlation between pairwise variables. The results of the questionnaire are as follows:

Table 7 Correlation analysis (n = 366).

		①	②	③	④	⑤	⑥
①	Pearson correlation	1					
	Significance						
②	Pearson correlation	0.672***	1				
	Significance	0.0000					
③	Pearson correlation	0.634**	0.712***	1			
	Significance	0.0000	0.0000				
④	Pearson correlation	0.584***	0.825**	0.692***	1		
	Significance	0.0000	0.0000	0.0000			

		①	②	③	④	⑤	⑥
⑤	Pearson correlation	0.470**	0.732***	0.489***	0.668***	1	
	Significance	0.0000	0.0000	0.0000	0.0000		
⑥	Pearson correlation	0.745***	0.659**	0.748***	0.690***	0.630**	1
	Significance	0.0000	0.0000	0.0000	0.0000	0.0000	

Note: ***, **, * represent significant significance levels of 0.1 %, 1 %, 5 % respectively, with t in parentheses (where ①: behavioral loyalty, ②: attitude loyalty, ③: full loyalty, ④: task performance, ⑤: Context performance, ⑥: adoption performance)

The correlation between employee behavioral loyalty and employee performance (task performance, context performance, adoption performance) was 0.584, 0.825, 0.692, respectively, and was significant at the level significance level of 0.1, 1, and 0.1 %, respectively, that is, a significant positive correlation, preliminarily verifying hypothesis 1.

The correlation between employee attitude loyalty and employee performance (task performance, context performance, adoption performance) was 0.470, 0.732, 0.489, respectively, and was significant at the significance level of 1, 0.1 and 0.1 %, respectively, that is, a significant positive correlation, preliminarily verifying hypothesis 2.

The correlation between employee full loyalty and employee performance (task performance, context performance, adoption performance) was 0.745, 0.659 and 0.748, respectively, and was significant at the significance level of 0.1, 1 and 0.1 %, respectively, that is, there is a significant positive correlation, preliminarily verified hypothesis 3.

Results of the model regression

Based on collecting 366 effective sample data, an analytical regression model was established to determine the intrinsic causality and the mechanism of action of this relationship. The core idea of the regression model is to obtain certain rules and further express them through function relations under the premise of observing the correlation of variables, and the obtained function correlation is the regression equation. Considering that the dependent variables may be combined by multiple factors, in this study, the hypothetical relationship will be tested by multiple linear regression analysis.

Hypothesis H1: Employee behavior loyalty has a significant positive promotion effect on employee performance;

Hypothesis H1-1: Employee behavior loyalty to Task performance is a significant positive effect;

Hypothesis H1-2: Employee behavior loyalty to Context performance is a significant positive effect;

Hypothesis H1-3: Employee behavior loyalty to Adoptive performance is a significant positive effect;

To test the hypothesis H1: Employee behavior loyalty has a significant positive promotion effect on employee performance:

Table 8 Hypothesis 1 testing.

Variables	Task performance	Context performance	Use performance
Behavioral loyalty	0.914*** (24.923)	0.763*** (16.392)	−0.214*** (8.236)
Constant	0.634*** (9.224)	0.625*** (3.271)	0.480*** (14.845)
Number of observed	366	366	366
R2	0.428	0.562	0.239
Adjusted R2	0.440	0.586	0.248
F	56.954***	122.583***	87.604***

Note: ***, **, * are significant at 1%, 5%, 10% significance levels, respectively, with t value in parentheses.

Table 8 shows that employee behavioral loyalty has a significant impact on task performance and context performance, and the Adjusted R of the model 2 These were 0.440 and 0.586, respectively. The overall goodness of fit is good; the F test values are 56.594 and 122.583 respectively, and the probability above 99 % is significant. However, the significance index of the adopted performance influence model was -0.214, which showed that there is no obvious significant effect of the model.

Based on the above data, it can be concluded that in the research assumptions H1, H1-1 and H1-2 assumptions are valid, and H1-3 assumptions are not valid. Employee behavior loyalty has a significant positive effect in promoting the performance of employees, specifically: Employee behavior loyalty to task performance is a significant positive promotion effect; Employee behavior loyalty to context performance is a significant positive promotion effect; Employee behavior loyalty to the performance is not a positive effect. Nest table testes the hypothesis H2: Employee loyalty has a significant positive effect on employee performance:

Table 9 Hypothesis 2 testing.

Variables	Task performance	Context performance	Use performance
Attitude loyalty	0.836^{***}	0.746^{***}	0.625^{***}
	(16.385)	(5.274)	(35.922)
Constant	0.664^{***}	0.602^{***}	0.482^{***}
	(3.512)	(9.117)	(4.263)
Number of observed	366	366	366
R2	0.422	0.631	0.456
Adjusted R2	0.440	0.655	0.480
F	143.23^{***}	108.86^{***}	57.32^{***}

Note: ***, **, * are significant at 1 %, 5 %, 10 % significance levels, respectively, with t value in parentheses.

According to **Table 9** employees are attitude loyal Task performance, context performance, and adoption performance all had significant positive effects. The model of the Adjusted R2 They were 0.440, 0.655 and 0.480, respectively, and the overall goodness of fit was good; The F test values were 143.23, 108.86 and 57.32, respectively, indicating that the over 99 % probability of the model is significant. Based on the above data, it can be concluded that in H2, the H2-1, H2-2 and H2-3 assumptions are valid. That is, employee attitude and loyalty has a significant positive promotion effect on employee performance. specifically, for: Employee attitude and loyalty to task performance is a significant positive promotion effect; Employee attitude and loyalty to context performance is a significant positive promotion effect; Employee attitude and loyalty to adoptive performance was a significant positive facilitation effect. To verify that H3: Employee overall loyalty has a significant positive effect on employee performance:

Table 10 Hypothesis 3 testing.

Variables	Task performance	Context performance	Use performance
Full loyalty	0.641^{***}	0.487^{***}	0.668^{***}
	(8.92)	(7.34)	(12.65)
Constant	0.582^{***}	0.568^{***}	0.836^{***}
	(6.53)	(22.31)	(8.46)
Number of observed	366	366	366
R2	0.754	0.640	0.490
Adjusted R2	0.780	0.660	0.500
F	18.48^{***}	24.35^{***}	135.53^{***}

Note: ***, **, * are significant at 1 %, 5 %, 10 % significance levels, respectively, with t value in parentheses.

Table 10 indicates that the staff are fully loyal Task performance, context performance, and adoption performance all had significant positive effects. The model of the Adjusted R2 were 0.780, 0.660 and 0.500, respectively, and the overall goodness of fit was good; The F test values were 18.48, 24.35, and 135.53, indicating that the probability above 99 % is significant. Based on the above data, it can be concluded that in the research hypothesis H3, the H3-1, H3-2 and H3-3 assumptions are valid. That is, the full loyalty of employees has a significant positive promotion effect on employee performance. Specifically, the full loyalty of employees' task performance is a significant positive effect; Full loyalty of employees' context performance is a significant positive effect; Full loyalty of employees' adoptive performance was a significant positive facilitation effect.

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