Empirical Research on the Influencing Factors of College Teacher's Salary Satisfaction - Taking Private Colleges in Sichuan Province as an Example

^{1*} Maoqiao Zou 2 Nutteera Phakdeephirot

^{1,2} Rattanakosin International College of Creative Entrepreneurship, Rajamangala University of Technology Rattanakosin, Thailand *Corresponding Author: zou.maoqiao@rmutr.ac.th

Information of Article

Article history: Received: Feb 2023 Revised: Mar 2023 Accepted: May 2023 Available online: Jun 2023

Keywords:

College Teachers Salary Satisfaction Influencing Factors

ABSTRACT

The objectives of this research were (1) to investigate the current satisfaction of college teachers with their salaries; (2) to judge the influencing factors of college teachers' satisfaction with their salaries according to the relevant analysis results; (3) to summarize the factors influencing college teachers' satisfaction with their salaries. This qualitative research adopted questionnaire survey to collect data, selected six universities in Chengdu through stratified sampling, and then used simple random sampling to select 300 teachers to distribute questionnaires, and recovered 264 valid questionnaires. Finally, statistical analysis and regression analysis were used to analyze the current situation of private university teachers' salary satisfaction and the factors affecting private university salary satisfaction. Major results include (1) the overall salary satisfaction of teachers in private universities in Sichuan is relatively low; (2) the factors affecting the overall salary satisfaction of university teachers mainly include gender, age, school type, external fairness and internal fairness; (3) there is a positive correlation between the age, school type and salary fairness satisfaction of university teachers. The older the university teachers, the higher their salary fairness satisfaction; the better the school, the higher their salary fairness satisfaction.

1. Introduction

1.1 Background

Due to the development of popularization and popularization of higher education in China, the number of college students studying in specialized and undergraduate courses increases every year at a certain rate, which adds a huge burden to college teachers. For teachers, salary is not only an important economic security for their daily life, but also reflects their social value. The satisfaction of salary determines the enthusiasm and input of teachers in daily student education and management. In the case of low salary satisfaction, it is easy to have negative deceleration and other phenomena, which will affect the overall level of education in colleges and universities. On the morning of September 8, 2021, the Ministry of Education held the 6th Educational Golden Autumn Series Conference. The latest statistics were announced at the conference: College teachers increased by 5.34%. In addition, the conference mentioned relevant construction measures for college teachers, which is worth looking forward to early implementation. Financial departments at all levels continue to increase education funding, optimize the structure of funding, and accelerate the reform of the salary system for teachers in colleges and universities. During the "Thirteenth Five-Year Plan" period, among the national fiscal education funds, the proportion of faculty wages and welfare expenditures has remained at about 61%, which is the largest expenditure. In the next step, the Ministry of Finance will continue to conscientiously implement the decision-making and deployment of the central government on building a high-quality education system, further consolidate and improve the policy system together with the Ministry of Education and other departments, deepen the reform of systems and mechanisms, and take the lead in urging local governments to follow the requirements of "two only increase but not decrease", implement financial education expenditure responsibilities, and always give priority to the construction of teachers as the focus of investment, and continuously improve the status and treatment of teachers. In December 2020, Sichuan Province launched a pilot project to improve the performance-based salary policy in 46 provincial colleges and universities,

striving to increase the total amount of performance-based salary in colleges and universities and expanding the autonomy of colleges and universities in salary distribution. In January 2022, the Talent Work Conference of the Sichuan Provincial Party Committee proposed that qualified colleges and universities should be granted authority such as establishment and use, post setting, professional title evaluation, assessment and evaluation, and income distribution, so as to allow greater autonomy for talent selection and employment. Space. Sichuan Province belongs to the western region of China, and the development of higher education is largely influenced by the regional economy, social development level and traditional way of thinking. In 2021, among the national college teacher income rankings, the income of college teachers in Sichuan Province ranks 16th. The average income of college teachers in Sichuan Province is 90,160 yuan, which is lower than the national average of 97,379 yuan. Therefore, there are some problems in the salary system of college teachers in Sichuan.

1.2 Goals

Firstly, to investigate the current satisfaction level of college teachers with their salaries; Secondly, to determine the influencing factors of college teachers' satisfaction with their salaries based on the relevant analysis results; Thirdly, to summarize the factors affecting college teachers' satisfaction with their salaries.

2. Literature Review

2.1 The Impact of Salary Level on Teacher Salary Satisfaction

Expectation theory holds that an individual's behavior is aimed at producing maximum happiness and minimum pain, and that work performance is only a means to achieve goals or personal satisfaction. If individuals can get expected rewards at work, they will become high performers, job satisfaction will be higher, and vice versa will become a low performer, job satisfaction is also low. From the expectation theory model, it can be seen that the combination of valence and expected value produces motivation; if one of them is zero, the motivation is equal to zero. Therefore, even if some goals are very attractive, if they are not achieved, no one will care about them. Similarly, although the goal is easy to achieve, if the individual has little interest in the reward after achieving the goal, then such goal cannot form a real incentive for the individual. Incentive force drives the behavior subject to act and make efforts for the realization of the goal; and its efforts under the influence of the environment and personal ability will determine the real behavior of people at work; different behaviors will lead to different results; Different outcomes bring different aspects of satisfaction and different levels of satisfaction. In order to truly achieve the goal of motivating employees, managers must not only enable employees to have the intensity (valence) of action results, or increase their intensity, that is, to promote their enthusiasm for acting, but also drive employees to realize their expectations, that is, to increase their expectations. Only in this way can it really play a motivating role. Satisfactory salary can have a great incentive effect, and salary management is like a baton, guiding teachers to act in line with the goals of universities. Usually, when the low-level salary needs of teachers are met, higher-level salary levels are usually expected, and teachers' salary needs often coexist at multiple levels. From the perspective of incentives, the higher the degree to which teachers' salary needs are met, the greater the incentive effect of salary on teachers; otherwise, it is likely to produce passive sabotage, low work efficiency, tense interpersonal relationships, organizational cohesion and as the famous American comparative economist Egon Newberg said: "No matter what kind of stimulus structure is adopted, if this structure is to be effective, it must be the same objective function of the parties involved." From this point of view, the incentive effect of salary is very important. Generally speaking, the higher the salary level, the higher the satisfaction of teachers with the salary. According to He (2018), the overall salary level of college teachers in China is low at present, and the salary structure is not reasonable enough, which is easy to cause dissatisfaction among teachers. It should be promoted by improving the overall salary level and implementing the overall salary and broadband salary, reducing the intensity of performance salary, increasing the proportion of basic performance salary, and then practicing performance to promote the development of college teachers. Bao (2020) believes that young teachers carry a major mission in the development of universities, and their growth is directly related to the longterm development of university personnel training and discipline construction. For young teachers whose work and life are in their infancy, salary is not only the guarantee of their basic life, but also an effective incentive to stimulate their inner potential and creativity. However, young teachers in ordinary colleges and universities have practical problems such as low annual income and low sense of salary fairness, which affect the satisfaction of young teachers with salary. To sum up, this paper believes that the salary level is positively related to the salary satisfaction of college teachers.

2.2 The impact of work pressure on teachers' salary satisfaction

Generally speaking, the work pressure is also high, and the higher the salary expectations of college teachers, they hope to get compensation through salary. If the salary level does not meet the expectation, it will affect the salary satisfaction. Li and Pei (2006) investigated the current situation of college teachers' salary satisfaction in Chongqing through the self-compiled questionnaire on college teachers' salary satisfaction, and analyzed the influencing factors, and came to the following conclusions: Firstly, the overall level of college teachers' salary satisfaction is not high. Through the percentage test of college teachers' salary satisfaction, it is found that at the overall level, college teachers Generally have low satisfaction. Secondly, the salary satisfaction of college teachers has affected their professional loyalty. Employees with high loyalty can create more value. Because the general low salary satisfaction of college teachers affects their professional loyalty, this is a problem that cannot be ignored. Thirdly, through the analysis of the four dimensions of work pressure, gender, courses taught, and professional titles, the results show that work pressure is an important factor affecting the salary satisfaction of college teachers, and young teachers' salary satisfaction is relatively low. Chen (2019) surveyed the salary satisfaction of teachers in 15 undergraduate colleges and universities in Fujian Province, showing that professional titles, actual income and sense of fairness, and teachers' professional loyalty are positively correlated with salary satisfaction, age and expected income are negatively correlated with salary satisfaction, there is a U-shaped relationship between workload and salary satisfaction. To improve teachers' salary satisfaction, schools should start from improving teachers' salary level, enhancing the external competitiveness of teachers' salary, improving the salary structure, paying attention to the living conditions of young and middle-aged teachers, improving teacher's internal salary, and strengthening spiritual incentives. To sum up, this paper believes that job stress is negatively related to the salary satisfaction of college teachers.

2.3 Fairness Perception's Impact on University Faculty Salary Satisfaction

The fairness theory put forward by American psychologist John Adams (1956) believes that employees' enthusiasm for work is not only affected by the amount of remuneration they actually receive, but also by comparison with other people's remuneration. In daily life, people will compare the actual remuneration they get with their own investment, or compare the remuneration received by others with their own remuneration. Or they will compare the input number of others with their own input amount according to their actual compensation. When people feel that the remuneration, they get is reasonable, and it is fairer to compare with themselves and others, it will maintain the original work input; When the amount of paid work feels unreasonable, there will be a sense of unfairness, and in order to seek this sense of fairness, the amount of work input may be reduced. In management, it is not only the actual amount of remuneration that affects the incentive effect, but also the inner feeling compared with others. When incentivizing, we should try our best to ensure fairness and implement a fair remuneration system so that employees feel that their efforts are rewarded. In order to avoid unfair negative emotions of employees and affect the realization of organizational performance. The basic point of view of fairness theory is when a person has made achievements and received rewards, he will compare his efforts (including effort, time and energy spent on work, education level, experience, qualifications, and status) with those obtained. (Salary, benefits, praise, affirmation, promotion, promoted status, etc.) are compared with the corresponding reference objects, so as to judge the fairness of the rewards they receive, and further respond accordingly. College teachers are under relatively high work pressure, and they hope to obtain fair remuneration. If the remuneration is unfair, it will affect their satisfaction with remuneration. Chen Ran (2016) surveyed the salary satisfaction of teachers in 15 undergraduate colleges and universities in Fujian Province, showing that professional titles, actual income and sense of fairness, teachers' professional loyalty are positively correlated with salary satisfaction, and age and expected income are positively correlated with salary satisfaction. There is a negative correlation, and there is a U-shaped relationship between workload and salary satisfaction. Meng, Wang, and Li (2019) based on the survey data of the "China Teacher Development Report 2019" research group of the Teacher Education Research Institute of Northeast Normal University, from the perspective of fairness theory, the salary satisfaction of Chinese primary and secondary school teachers and its correlation Influencing factors were empirically studied. The research found that: the salary income and salary satisfaction of primary and secondary school teachers in China are Generally not high, and the sense of proportionality between labor effort and salary income is low, and this sense of commensurateness is the main factor leading to the low salary satisfaction of teachers; most teachers they believe that their salary income is lower or far lower than the salary level of local civil servants. This sense of comparison is also the main factor leading to the low satisfaction of teachers' salary. To sum up, this paper believes that the sense of fairness is positively related to the salary satisfaction of college teachers.

3. Methodology

3.1 Research Methods

3.1.1 Statistical Analysis Method

After obtaining the sample data of the questionnaire survey, SPSS 20.0 statistical software was used to conduct descriptive statistical analysis and correlation analysis on the satisfaction of teachers' salaries in six private universities in Sichuan.

3.1.2 Regression Analysis Method

Carry out regression analysis using questionnaire data, and further explain and explain, based on statistical data, to draw conclusions on the satisfaction of teachers' salaries in six private universities in Sichuan and the influencing factors of the satisfaction of salaries in six private universities in Sichuan.

3.2 Data Collection

Before conducting the survey, the size of the sample should be selected according to the content, purpose, and accuracy requirements of the survey. However, when conducting the survey, the cost required for the survey and the various problems encountered in actual operation must also be taken into consideration. This problem is complex and involves a lot of issues, both qualitative and quantitative. In simple terms, from a qualitative perspective, the selection of methods, the importance of the accuracy of the survey results, and the nature of the survey will all affect the size of the sample. From a quantitative perspective, the calculation methods for different method selections are naturally different. In summary, the size of the sample mainly depends on the size of the required and allowed error, the confidence level required for inference, the degree of variation of the research object, the accuracy requirement, and the confidence level required for inference, Generally the confidence level is 95%. It is undeniable that there are many ways to determine the total amount of samples, but through the verification of the formula, it is found that when the confidence and error interval are within a certain range, the results of the survey calculated by different sample size calculation formulas and methods are not very different, sometimes even very similar. Therefore, in this case, simple random sampling is used to calculate the sample size, and then approximate the result when using other sampling methods. This way, the result is not only accurate, but also faster and more convenient. There are two main types of simple random sampling to determine the sample size. Average type variable: For known data that are absolute numbers, the required sample size is usually calculated according to the following steps. Given the accuracy of the expected survey results e, the confidence of the expected survey results Z, and the specific data of the standard deviation estimate of the population σ , and the number of units in the population N. The formula for calculation is:

$$n = \frac{NZ^2\delta^2}{Ne^2 + Z^2\delta^2} \tag{1}$$

Percentage type variable: Calculate the sample size according to the following steps. The accuracy value of the general survey results is percentage e, and the confidence level Z, the proportion estimate (P), and the total number is N. The calculation formula is as follows:

$$n = \frac{NZ^{2}P(1-P)}{Ne^{2} + Z^{2}P(-P)}$$
(2)

Ignoring the overall sample, then:

$$n = \frac{Z^2 P(1 - P)}{e^2} \tag{3}$$

Assuming the confidence level is 95%, Z=1.96 according to the table. Moreover, the principle of "follow the big" is applied to P-P2, and the derivative is set to zero to get the maximum value of P=0.5. Assuming the error of this survey is within 0.1, the minimum sample size of this survey is:

$$n = \frac{1.96^2 \times 0.5 \times 0.5}{0.1^2} \approx 96$$

Currently, there are 53 undergraduate colleges and 81 vocational colleges in Sichuan, including 18 private undergraduate colleges and 34 private vocational colleges. This paper chooses to survey the teachers in private colleges and universities due to the fixed and difficult-to-adjust salary system of public institutions. Three first-class private undergraduate colleges and three second-class private specialized colleges are selected, and 50 teachers from six private colleges are chosen to distribute questionnaires in order to obtain the data mainly through Questionnaire Star.

4. Data Analysis and Results

4.1 Salary Satisfaction Results

As shown in Table 1, after surveying the satisfaction of teachers' salaries in universities in Sichuan, the survey results showed that teachers in universities in Sichuan had a lower overall satisfaction with their salaries. In the evaluation of the overall salary of the school, as many as 92.8% of college teachers rated their satisfaction with their salary level as average, relatively dissatisfied, and very dissatisfied, while the number of college teachers who were relatively satisfied with the current salary only accounted for 7.2% of the population. In terms of the basic salary of college teachers, the satisfaction rate is also the same as the overall satisfaction rate of salary, with only 5.68% of college teachers being more satisfied with the current basic salary level. In terms of the other part of salary composition, performance salary, only 7.95% of college teachers are more satisfied with the current performance salary level, and the remaining 92.05% of college teachers are Generally or below satisfied with the performance salary level. In terms of bonus and welfare, 35.99% of college teachers are not satisfied or very dissatisfied with the school bonus and welfare. In terms of satisfaction with the school's salary increase, 9.09% of college teachers expressed satisfaction, and 90.91% expressed general, dissatisfaction and very dissatisfaction. When compared with teachers of the same title in this school, more than 50% of college teachers felt general, and only 7.95% of college teachers were relatively satisfied. In general, college teachers who accepted the questionnaire were not satisfied with the internal fairness of the current salary distribution. It can be seen that the satisfaction of college teachers in the surveyed sample area with the internal fairness of salary distribution is relatively low. In order to understand the evaluation of the fairness of external salary of universities in Sichuan Province, this survey questionnaire requires the surveyed teachers to evaluate the fairness of their income compared with other people in the same position in the same type of school. Compared with other universities, 6.06% of the teachers felt relatively satisfied, but 25% of the teachers still felt relatively dissatisfied or very dissatisfied. The statistical analysis of the answers to this question shows that the satisfaction of external fairness of salary distribution among college teachers in the surveyed area is relatively low. In terms of salary structure in schools, the number of general college teachers is the largest, accounting for 57.58% of the total number; only 9.47% of college teachers are considered relatively satisfied. As for the salary differences of different positions in the school, 36.74% of college teachers are considered unsatisfied or very unsatisfied. 65.53% of college teachers expressed dissatisfaction or very dissatisfaction with the current salary management system of the school, with a low satisfaction rate.

Table 1 Survey respondents' comprehensive evaluation of school salary

question	satisfaction	Number of samples (person)	percentage (%)
Your overall	Quite satisfied	19	7.20
compensation	Generally	158	59.85
	Relatively dissatisfied	74	28.03
	Very dissatisfied	13	4.92
Your base salary	Quite satisfied	15	5.68
·	Generally	162	61.36
	Relatively dissatisfied	78	29.55
	Very dissatisfied	12	4.55
Your performance pays	Quite satisfied	21	7.95
	Generally	146	55.30
	Relatively dissatisfied	81	30.68
	Very dissatisfied	16	6.06
Your bonus benefits	Quite satisfied	20	7.58
	Generally	149	56.44
	Relatively dissatisfied	77	29.17
	Very dissatisfied	18	6.82
Benefits you receive	Quite satisfied	17	6.44
	Generally	152	57.58
	Relatively dissatisfied	82	31.06
	Very dissatisfied	13	4.92
Your rate of increase to	Quite satisfied	24	9.09
your pay	Generally	148	56.06
	Relatively dissatisfied	73	27.65
	Very dissatisfied	19	7.20
Your Raise Bar for	Quite satisfied	17	6.44
School Salary	Generally	162	61.36
	Relatively dissatisfied	73	27.65
	Very dissatisfied	12	4.55
Compared with teachers	Quite satisfied	21	7.95
with the same title at the	Generally	148	56.06
same school, how much	Relatively dissatisfied	84	31.82
do you think about your salary	Very dissatisfied	11	4.17
the salary of teachers	Quite satisfied	16	6.06
with the same position in	Generally	182	68.94
other schools of the same	Relatively dissatisfied	54	20.45
type, what do you think	Very dissatisfied	12	4.55
Compared with the	Quite satisfied	36	13.64
salary of non-university	Generally	164	62.12
enterprise employees,	Relatively dissatisfied	49	18.56
what do you think	Very dissatisfied	15	5.68
Your evaluation of the	Quite satisfied	25	9.47

current school salary	Generally	152	57.58
structure	Relatively dissatisfied	67	25.38
	Very dissatisfied	20	7.58
Your evaluation of the	Quite satisfied	21	7.95
salary difference of	Generally	146	55.30
different positions in the	Relatively dissatisfied	81	30.68
current school	Very dissatisfied	16	6.06
evaluation of the current	Quite satisfied	24	9.09
school's overall salary	Generally	149	56.44
system	Relatively dissatisfied	77	29.17
	Very dissatisfied	14	5.30

4.2 Variance Analysis Results

4.2.1 Variance Test of Gender on Research Variables

Gender is divided into two categories, male and female. Table 2 shows the variance test of gender on the research variables. Single-factor variance analysis was used to examine the differences in overall satisfaction with salary, satisfaction with salary level, satisfaction with salary fairness, and satisfaction with salary management among college teachers of different genders. According to the data in Table 2, the F value of overall satisfaction with salary is 21.429, corresponding to a P value less than 0.05, which can be considered that there is a significant difference in overall satisfaction with salary between teachers of different genders in universities. Similarly, according to the data in Table 9, there is a significant difference in fairness satisfaction with salary and management satisfaction with salary between teachers of different genders in universities.

Table 2 Variance test of gender on satisfaction

ANOVA						
Variables	Gender	Quantity	Average	Standard Deviation	F Value	Significance
overall salary satisfaction	male	158	1.9 6	1. 359	21 .4 29	.021 **
	female	106	2.18	0.7 94	_	
	total	264	2. 08	1.098	_	
Pay level satisfaction dimension	male	158	2. 24	0.896	5.389 _	.07 2
differential	female	106	2. 31	0.9 92	_	
	total	264	2. 27	0. 472	_	
Dimensions of Pay Fairness Satisfaction	male	158	1.97	0. 7 96	8. 724	.00 4 **
Sutisfaction	female	106	2.43	1. 125	_	
	total	264	2.24	1.063	_	
Compensation Management Satisfaction Dimensions	male	158	2. 07	0.782	13.517 _	.000 ***
Substitution Dimensions	female	106	2.46	1. 135	_	
	total	264	2.28	1.036	_	

4.2.2 Variance Test of Research Variables by Age

Age is divided into four stages: below 25 (inclusive), 26-35, 36-45, and 46 (inclusive) and above. Table 10 shows the variance test results of age on salary satisfaction. Similarly, single-factor variance analysis was used to discuss the differences in overall salary satisfaction, salary level satisfaction dimension, salary fairness satisfaction dimension, and salary management satisfaction dimension for college teachers of different ages. According to the data in Table 3, the F value of overall satisfaction with salary is 17.364, corresponding to a P value less than 0.05, which can be considered that there is a significant difference in overall satisfaction with salary among college teachers of different ages. Similarly, according to the data in Table 10, there is a significant difference in fairness satisfaction with salary and management satisfaction with salary among college teachers of different ages.

Table 3 Variance test of age on satisfaction

Variables	Age	Quantity	Average	Standard Deviation	F	Significant
Overall salary satisfaction	≤25	5	2.08	.917	17.364	.004 **
	26-35	64	2. 15	.806	_	
	36-45	118	2. 27	1. 04 9	_	
	≥46	77	2. 83	1. 124	_	
Pay level satisfaction dimension	≤25	5	2. 06	.659 _	.9 62	.397
	26-35	64	2. 13	.73 8	- - -	
	36-45	118	2. 25	.8 5 2 _		
	<u>≥</u> 46	77	2.37	.947 _		
Dimensions of Pay Fairness	≤25	5	2.0 3	.959	3. 724	.01 2 **
Satisfaction	26-35	64	2.0 8	.904	_	
	36-45	118	2. 15	1.299	_	
	<u>≥</u> 46	77	2. 27	.707	_	
Compensation Management	≤25	5	1.9 4	.723 _	5. 684	.002 **
Satisfaction Dimensions	26-35	64	2. 06	.927 _	_	
	36-45	118	2. 16	1. 154	_	
	<u>≥</u> 46	77	2.2 8	1.192	_	

Note: *: P<0.05; **: P<0.01; ***: P<0.001

4.3 Analysis Results

4.3.1 Correlation Analysis between Work Pressure and Salary Satisfaction

Relevant analysis is a statistical method to study whether there is a certain dependence between phenomena, and to study the correlation between random variables. In this section, Pearson correlation coefficient will be used to analyse the degree of closeness between the variables affecting teacher's salary satisfaction and satisfaction. According to the Pearson correlation analysis results in Table 4, the correlation between workload of college teachers

and overall satisfaction with salary is -0.428, the correlation between satisfaction with salary level dimension is -0.243, the correlation between satisfaction with salary fairness dimension is -0.252, and the correlation between satisfaction with salary management dimension is -0.138, showing a negative correlation. At the same time, the P value (0.000) of the correlation coefficient test statistic of the overall salary satisfaction dimension, salary level satisfaction dimension and salary fairness satisfaction dimension is less than the significance level α (0.05), so there is a negative correlation between the workload of college teachers and salary satisfaction, the greater the work pressure, the lower the overall salary satisfaction, the lower the salary level satisfaction, and the lower the salary fairness satisfaction.

Table 4 Pearson correlation analysis table of workload and salary satisfaction

Relevant factor		Workload	Overall compensation satisfaction	Pay level satisfaction dimension	Pay Equity Satisfaction Dimensions	Full salary management Italian dimension
workload	Pearson Correlation	1	0 4 28 **_	24 3 **_	25 2 _	1 3 8
	significant (Both sides)		.00 5	.0 42	.03 6 _	.324 _
	N	264	264	264	264	264
Overall compensation satisfaction	Pearson Correlation	0 4 28 ** -	1	. 662 ***	.0 432 ***	.0 451 ***
Satisfaction	significant (both sides)	.00 5		.000	.000	.000
	N	264	264	264	264	264
Pay level satisfaction dimension	Pearson Correlation	24 3 **_	. 662 ***	1	.014 _	.0 12
	significant (Both sides)	.0 42	.000		.925 _	.946 _
	N	264	264	264	264	264
Pay Equity Satisfaction Dimensions	Pearson Correlation	25 2 _	.0 432 ***	.014 _	1	.0 11
	significant (Both	.03 6 _	.000	.925 _		.913 _
	N	264	264	264	264	264
Full salary management Italian dimension	Pearson Correlation	1 3 8	.0 451 ***	.0 12	.0 11	1
dinvision	significant (Both sides)	.324 _	.000	.946 _	.91 3 _	

N	264	264	264	264	264	

Note: **. Significantly correlated at the 0.01 level (two-sided); *. Significantly correlated at the 0.05 level (two-sided).

4.3.2 The correlation between external fairness and compensation satisfaction

The implementation and implementation of the salary system of college teachers, the improvement of the salary level of college teachers, first of all, requires the state to formulate relevant policies and regulations, and make clear provisions on the salary system of teachers, in order to ensure the implementation and implementation of the salary system of teachers, all these issues such as the sources of teacher's salary and funding, the standards of salary, the distribution of salary, labor and wage disputes, etc. need to be regulated by the state in the form of law, in order to improve the legal protection for the implementation of the salary system for college teachers. According to the Pearson correlation analysis results in Table 4, the correlation between workload of college teachers and overall satisfaction with salary is -0.428, the correlation between satisfaction with salary level dimension is -0.243, the correlation between satisfaction with salary fairness dimension is -0.252, and the correlation between satisfaction with salary management dimension is -0.138, showing a negative correlation. The external fairness of college teacher's salary refers to the satisfaction degree of salary in the heart of college teachers compared with the salary of other non-college units except themselves, and all the faculty members with the same title in the whole college and other colleges. If college teachers perceive the external fairness of their salary to be high, then their satisfaction with their own salary will also be high, which will increase their work enthusiasm; if college teachers perceive the external fairness of their salary to be low, then their satisfaction with their own salary will also decrease, which will reduce their work enthusiasm. All these issues such as the sources of teacher's salary and funding, the standards of salary, the distribution of salary, labor, and wage disputes, etc. need to be regulated by the state in the form of law, in order to improve the legal protection for the implementation of the salary system for college teachers.

Table 5 Pearson correlation analysis table of external fairness and salary satisfaction

Relevant factor		Compared with the same title of the school	Compared with the same title in other schools	Compared with non-university units compared to	Overall salary satisfaction
Compared with the same title of the school	Pearson Correlation	1	.0728 ****_	. 604 ***	.61 2 _
	significant (Both sides)		.00 0	.0 00	.000 _
	N	264	264	264	264
Compared with the same title in other schools	Pearson Correlation	.0728 *** _	1	.681 *** _	.0 676 ***
	significant (Both sides)	.00 0		.000	.000
	N	264	264	264	264

Compared with non- university units	Pearson Correlation	. 604 ***	.681 ***	1	.658 *** _
	significant (Both sides)	.0 00	.000		.000
	N	264	264	264	264
overall salary satisfaction	Pearson Correlation	.61 2 _	.0 676 ***	.658 *** _	1
	significant (Both sides)	.000 _	.000	.000	
	N	264	264	264	264

4.3.3 Correlation between Internal Fairness and Compensation Satisfaction

The internal fairness of college teacher's salary refers to the satisfaction degree of college teachers in comparing the work input they pay and the salary they get. When college teachers believe that the salary they receive is commensurate with the amount of work they are currently doing, the internal fairness is higher and the satisfaction with the salary is higher; On the contrary, if college teachers think that the salary they receive cannot effectively measure their workload, then the internal fairness is relatively low and the salary satisfaction is low. As can be seen from Table 6, the correlation between personal fairness and salary satisfaction is 0.692, showing a significant positive correlation. Moreover, the P value (0.000) of the correlation coefficient test statistic is less than the significance level α (0.05), so there is a significant positive correlation between personal fairness and salary satisfaction, and personal fairness is also one of the factors affecting salary satisfaction.

Table 6 Internal fairness and salary satisfaction Pearson correlation analysis table

Relevant factor		Salary overall satisfaction	Satisfaction with benefits
Overall salary satisfaction	Pearson Correlation	1	.0687 ****_
	significant (Both sides)		.00 0
	N	264	264
Satisfaction with benefits	Pearson Correlation	.0687 ****	1
	significant (Both sides)	.00 0	0.00
	N	264	264

4.4 Regression Analysis

Based on the analysis in the previous section, the factors affecting the satisfaction of teachers' salaries in private universities in Sichuan are age, years of work, work input, work pressure, external fairness, and internal fairness. Regression analysis can be used to construct a regression linear model, and the coefficients of these variables can be used to determine the most and second most significant factors affecting the satisfaction of teachers' salaries in universities. Age (x1), years of work experience (x2), type of school (x3), work input (X4), work pressure (X5), external fairness (X6), internal fairness (X7) are taken as independent variables. The definitions of the variables are shown in Table 7. This study used overall salary satisfaction as the dependent variable (Y), with five options: completely unsatisfied, relatively unsatisfied, general, relatively satisfied, and completely satisfied, respectively assigned values from 1 to 5 in the variable selection.

Table 7 variable definition table

	Variable name	Symbol	Definition
Explained variable	Overall salary satisfaction	Y	Corresponding value of satisfaction
Explanatory variables	Age	X1	1=under 25 years old; 2= 26-35 years old. 3= 36-45 years old; 4=46 years old and above.
	Working years	X2	1= 5 years and below; 2= 6-15 years; 3= 16-25 years; 4= more than 25 years
	Types of school	X3	1=Junior College; 2=Undergraduate College
	Work input	X4	4=overload; 3=full; 2=normal workload; 1=not full
	Work pressure	X5	1=very small; 2=small; 3=average; 4=large; 5=very large
	External fairness	X6	1=very unfair; 2=relatively unfair; 3=general; 4=relatively fair; 5=very fair
	Internal fairness	X7	1=very unfair; 2=relatively unfair; 3=general; 4=relatively fair; 5=very fair

This paper uses a backward screening strategy to complete the establishment of a multiple linear regression equation in five steps. By screening the variables one by one backward, the regression model is finally determined. In this study, the overall salary satisfaction was taken as the dependent variable (Y). After recoding, there were four significant variables: school type, work pressure, internal fairness, and external fairness, with P values less than 0.01. Therefore, there was a significant linear relationship between school type, work pressure, internal fairness and external fairness and overall salary satisfaction, and it was appropriate to establish a linear model. The regression results are shown in Table 8.

Table 8 Regression coefficient table

Variable	Model	t-value	P value
X3	0.1 94 ***	7.138	0.009

X5	-0. 402 ***	- 15 .5 38	0.005	
X6	0. 486 ***	1 9. 273	0.001	
X7	0. 492 ***	15. 165	0.003	
cons	0. 294	1 .4 36		
R ²	0.7 84			

^{*}The results showed that there was a significant difference between the two groups (t=2.45, ***). *The results showed that there was a significant difference between the two groups (t=2.45, p<0.001).

5. Conclusion

Combining the previous variance analysis, correlation analysis and regression analysis, the following conclusion is drawn: The overall satisfaction of teachers' salaries in private universities in Sichuan is low. After empirical survey and research, the overall satisfaction of teachers' salaries in universities is low. In the evaluation of the overall salary of the school, as high as 92.8% of university teachers evaluate their salary level as general, relatively unsatisfactory, and very unsatisfactory, while the number of university teachers who are relatively satisfied with the current salary is only 7.2% of the total number of respondents. The main factors that affect the overall satisfaction of college teachers' salaries are gender, age, school type, external fairness, and internal fairness. The survey results of Chen Ran (2016) showed that sense of fairness is positively correlated with salary satisfaction. This paper divides fairness into internal fairness and external fairness. The survey results show that there is a significant positive correlation between external fairness, internal fairness, and overall salary satisfaction of college teachers. After correlating the two variables of external fairness and internal fairness of college teachers' salary fairness. It is finally determined that these two variables have a significant impact on the overall satisfaction of college teachers' salary. There is a positive correlation between the age, type of school and salary fairness satisfaction of college teachers. The older the college teachers are, the higher their salary fairness satisfaction is, the better the school is, the higher their salary fairness satisfaction is.

References

- Gong, Z. T. (2019). Discussion on the Reform of Salary System of Private Universities Based on the Goal of Efficiency Improvement. *China Economic and Trade Guide (Chinese)*, Vol. 21, No. 7, pp. 91-92.
- Liu, X. M. (2012). Analysis of Salary System for Teachers in Private Colleges. *China Management Informationization*, Vol 2.
- Luo, M. L., & Li, X. M. (2017). Problems and Countermeasures of Teacher Salary System in Private Universities in China. *Contemporary Economics*, Vol. 14, No. 32, pp. 118-119.
- Wang, B. P., & He, M.(2017). Reform of Teacher Salary System in Universities under the Background of "Double First-Class" Construction. *China Higher Education*, Vol. 16, No. 5, pp. 14-17.
- Zhao, D.P. (2015). Empirical Analysis of College Teachers' Salary Incentive Perception and Work Performance Taking Incentive Effect as Moderating Variable. *Journal of Sichuan Normal University (Natural Science Edition)*, Vol. 38, No. 6, pp. 938-942.
- Almahdi Ejreaw, A. M., & Annowari , N. B. (2023). Knowledge and use of Information Communication Technology in Libyan SMEs. Journal of Reproducible Research, 1(1), 37–49. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/15
- Alkipsy, E., Hanston, E., & Raju, V. (2023). Comprehending the Value of Process Communication Model (Pcm): in the Context of Management, Personal, Inter-Culture and Scientific Perspectives. Journal of Reproducible Research, 1(1), 103–108. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/23

- Qu, W., & Raju, V. (2022). Research on the Relationship Between the Development of Start-up Companies and The Quality of Entrepreneurs. Journal of Reproducible Research, 1(1). Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/7
- Kee , L. H. (2023). Analysis of Entrepreneurial Growth and Skill: Case Study on Global Innovation. Journal of Reproducible Research, 1(1), 90–93. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/21
- Dahwan, A., Raju, V., & Kassim, S. (2022). The The Role of Organizational Challenges and Technical Challenges on the Implementation of E-government Military Institutions: . Journal of Reproducible Research, 1(1), 9–21. https://doi.org/10.58288/jrr.v1i1.5
- Rasadurai, M., & Raju, V. (2023). Entrepreneurship and Innovation A Review. Journal of Reproducible Research, 1(1), 83–89. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/18
- Agarwal, M., Dr. Valliappan Raju, Dr. Rajesh Dey, & Dr. Ipseeta Nanda. (2023). Descriptive Research on AI-based tools to aid personalized customer service: Case of ChatGPT. Journal of Reproducible Research, 1(1), 140–146. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/27
- Gao, H., & Raju, V. (2023). Entrepreneur Ability And Firm Growth. Journal of Reproducible Research, 1(1), 61–66. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/16
- Huiwu, Y., & Hongmei, Y. (2023). The Influencing Factors of Turnover Intention of Post-90s Employees Evidence from small and medium-sized graphic design enterprises in Chongqing. Journal of Reproducible Research, 1(1), 109–122. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/24
- alkhaled, Y., Raju, V., & Kassim, S. (2023). Factors to Improve Customer Loyalty towards Yemeni Student Recruitment Agencies in Malaysia. Journal of Reproducible Research, 1(1), 50–60. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/12
- Alfawazan, L. (2023). The effect of firm size, profitability, liquidity and industry type on firm value. Journal of Reproducible Research, 1(1), 94–102. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/22
- Lumeizi, F., & Hongmei, Y. (2023). The Influencing Factors on Employees' Job Well-being -- Data from Architectural Material Enterprises in Guangdong Province, China. Journal of Reproducible Research, 1(1), 123–139. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/25
- Elburase, E. A., & Addokali, B. M. (2023). Eb Business intelligence technology success factors determine business performance within Libyan commercial businesses. Journal of Reproducible Research, 1(1), 71–82. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/20
- BUSADRA, A. (2023). Abdulgawad. H.A.busadra Libyan national football assessment and future prospective: Asia metropolitan University, Malaysia, *Corresponding Author: coachjawad239@gmail.com. Journal of Reproducible Research, 1(1), 67–70. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/17
- Lumeizi, F., & Hongmei, Y. (2023). The Influencing Factors on Employees' Job Well-being -- Data from Architectural Material Enterprises in Guangdong Province, China. Journal of Reproducible Research, 1(1), 123–139. Retrieved from https://journalrrsite.com/index.php/Myjrr/article/view/25
- Annamalai, R., Kalathinathan, A., & Vally, M. (2022). Pratt Software's Phonological Characteristics, Prosodic Features, and Importance. Journal of Reproducible Research, 1(1), 1–7. https://doi.org/10.58288/jrr.v1i1.4