INVESTIGATION INTO MOTIVATION AND JOB SATISFACTION AMONG TEACHERS IN THE COLLEGE EDUCATION SYSTEM

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Abstract

This paper aims to investigate the important factors affecting job satisfaction and motivation of teachers in college. The statistical population of this study includes 67 teachers at Zhejiang University of Science and Technology who have answered the questionnaire. The results of the study show the group of people whose age is above 46 show greater levels of job satisfaction and factors such as work experience have an impact on job satisfaction. Furthermore, we figure out the most essential factor is an increase in the teachers and professors' salary. The study also showed that teachers are satisfied with work conditions and have identified that they need to raise their teaching level by further studies. According to the further analysis, a strict evaluation system does not give a suitable result in improving motivation.

Keywords: Job satisfaction, motivation, questionnaire, salary, ANOVA test, Tamhane T2 Test.

1. INTRODUCTION

What is it motivation? Eventually, people understand it as actions which bring unexpected results in the future. For some people motivation primarily means a sequence of moves with rewards in the end. Meanwhile, others claim that motivation is just a sequence of remuneration for employees due to their workflow and as a result, productivity increased day by day.

The study of the problem of labor motivation occupies a special place among other studies on labor activity. It is the object of study of many scientists in the world. But it should be noted that the historical primacy in the study of the problem of motivation and motives that determine the process of motivation belongs to the foreign scientist.

In modern society, there are a lot of people and organizations which are trying to find what is the best form of motivation. The majority of people agree that an increase in salary can rise the productivity of their workers, while the minority claim that a high salary is not enough to keep their productivity at a high level.

Obviously, both of these 2 groups of people are right, for example, some people could be truly satisfied with a high level of income, but at the same time more and more people debate what will be more convenient for the employee; a high salary, the type of social package or even a privilege to satisfy their psychological side. For instance, in Compensation and Performance in Major League Baseball (Yu-Li Tao, Hwei-Lin Chuang, Eric S. Lin, 2015) the study investigated the salary disparity in a baseball league[1]. Whereas, in Motivation and Performance in Higher Education (Stefania Zlate, Gabriel Cucui, 2015) revealed methods of motivation which are incredibly important[2]. Meanwhile Hooman Khoshvenis and Abbas Tahmasebi (2016) evaluated the effective factors which influence employee job satisfaction and motivation system in the governmental organization[3].

The purpose of this paper is to identify what the government should provide and what motivates teachers from higher education in their daily life. The main target here is to show correlations between gender and all employees' salary which they have, in addition with job satisfaction and qualifications. Another purpose of this research is to show the percentage of teachers that think that improve educational status is more important than just increase their basic salary. Primarily, as the government has a huge influence on the educational process, in order to achieve results, it cannot be done in short term.

2. RESEARCH DESIGN AND QUESTIONNAIRE

Based on the idea of Taylor (1911)[11], it is believed that job satisfaction is an important aspect of motivation. Firstly, the questionnaire focuses on evaluating the participants' job satisfaction and factors affecting their satisfaction are listed. Secondly, the questions focus on factors that affect teacher's motivation and their professional development in the future. In the questionnaire, there are 5 questions which tell us what can motivate teachers and professors. The main reason why a questionnaire was chosen as the main form of research in this study is because it is one of the most direct ways to gather data; including to investigate the best forms of motivation for employees from the higher education system, and which factors have an important influence on job satisfaction. Questionnaires were distributed randomly and anonymously to ensure the authenticity of information. A total of 67 valid samples of questionnaires were received. Thereby, all answers can be separated and sorted.

The questionnaire was designed to display options which can satisfy all participants. The next step was to approach teachers and professors in person to participate in the questionnaire. The questions were also designed to reveal what the teachers and professors want from their job and if they think that there is something the government should do to assist teachers that are not satisfied with their job, for example providing more improved social packages. This study attempts to clarify whether the majority of respondents are absolutely satisfied with their job or not.

3. QUESTIONNAIRE MAIN FINDINGS

One of the main findings of the questionnaire was that most of the participants were satisfied with their job, a total of 84%, and only 16% of participants revealed to be partly satisfied with their job. Among those that revealed to be satisfied with their job, 49% of respondents expressed that they find their job to be interesting,

and 28% of respondents showed that they have a lot of free time. The least common answer of reasons why respondents are satisfied with their job was 'good salary', 14%, it was also found that 51% of all respondents earn less than 100 thousand CNY per year. Therefore, only 15% of them earn up to 250,000 CNY per year.

The average age of respondents was 35 years, and a total of 37 males and 30 females took part in the study, that's 55.2% male to 44.8% female. In addition, the majority of respondents revealed to possess "L" and "O" qualifications, 33% possessing L qualifications and 34% holding O qualifications, meanwhile only 19% of participants had "A.P." (assistant professor) status and 7% showed to have "P" (professor) status. All teachers and professors were chosen randomly. Based on articles which I found on research methods, it is better to find respondents at random who will not be prepared to answer questions, as respondents who have had time to prepare might answer differently.

4. STATISTIC METHODS AND ANALYSIS

In this part, statistical analysis and regression analysis was carried out using SPSS software. It can be seen from Fig. 1 that 84% of respondents are absolutely satisfied with their job and 16% satisfied partly, with this evidence it is clear that all employees satisfied or satisfied partly, there are no any teachers and professors who chose "not satisfied". It means that the main part of all employees is contented with their job. However, so many employees agree that their job is interesting, in the same way, people who chose answer "satisfied partly" is an employee who has less than 6 years work experience.

Fig.2 represents the percentage of all employees that would like to go in abroad. Most of respondents, 87% showed that they would prefer to go abroad to improve their knowledge for less than a year and for 1 to 2 years. Only 13% of respondents chose to stay in China and 4% who want to go abroad for more than 3 years. Furthermore, most of the respondent's who chose answer "b" which means do not go abroad are more than 40 years old (only 2 of them are 25 years old) and almost all of them have huge work experience, not to mention that fact that these employees already achieved a lot like a high position.
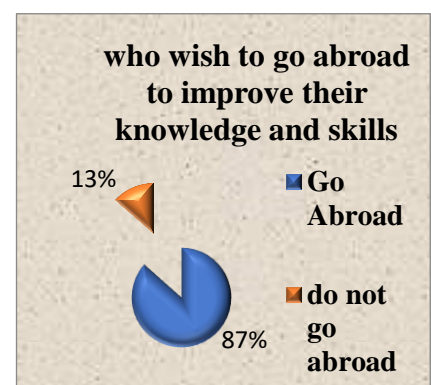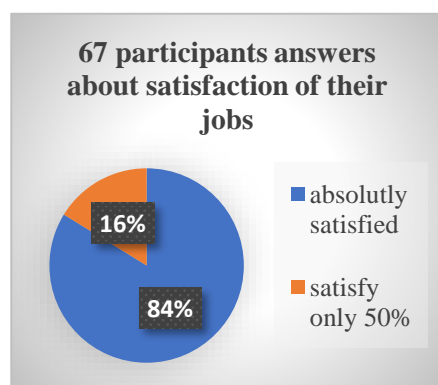

Figure1 Proportion of participants   Figure 2 Proportion of people who want to go abroad
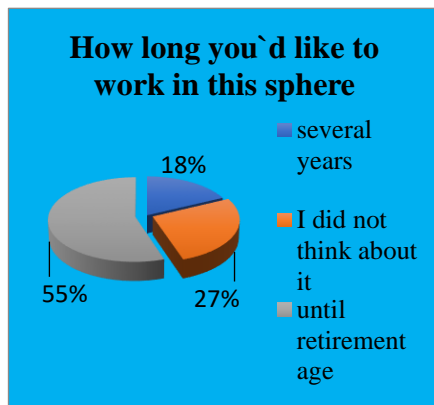
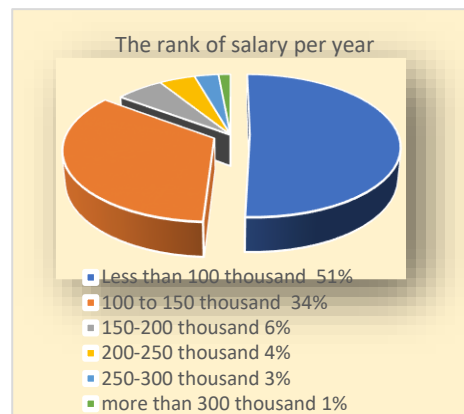Figure3 How long people would like to stay in this position   Figure 4 Salary per year

Meanwhile, Fig. 3 is showing how long respondents would like to work in this area. From the results it is shown that 55% of all respondents prefer to work "until retirement age". Typically, all employees understand that this job is stable and they would like to work until retirement age. However only 27% of all teachers and professors did not think about how long they want to stay in their job and only 18% of all respondents who are considering this work for "several years". To put it briefly, teachers who preferred answer "for several years" are less than 40 years.

As we can see from Fig. 4, more than 85% of teachers earn less than 150,000 CNY per year and only 4.5% possess a high salary and whose positions are professor status. For Hangzhou, where consumption is higher, the pressure on young teachers is conceivable.

Firstly, the study is investigating if the different age groups have a different impact on job satisfaction. Since the probability of the homogenus variance test is less than 0.05, which means the variance is non-homogenous, we use Tamhene T2 test to compare the influence of job satisfaction on a different age group. As we can see from Table 1, the probability is equal to 0.036 which is lower than 0.05, meaning the age group of 32-46 years and the group of above 40 years have a different impact on job satisfaction. In addition, employees above 46 years are more satisfied with their work than workers whose age 32-46 years. Relatively speaking, the younger participants in the study showed to be less satisfied with their jobs.

Table 1   Age comparisons according to Tamhane T^2 test

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
under 31	32-46	-.17544	.15426	.616	-.5893	.2384
	46 above	-.33333	.14213	.112	-.7328	.0661
32-46	under 31	.17544	.15426	.616	-.2384	.5893
	46 above	-.15789*	.05995	.036	-.3078	-.0080

| 46 above | under 31 | .33333 | .14213 | .112 | -.0661 | .7328 |
| | 32-46 | .15789* | .05995 | .036 | .0080 | .3078 |

*. The mean difference is significant at the 0.05 level.

Table 2 Work experience comparisons according to Tamhane T^2 test

(I) work_experience	(J) work_experience	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
less than 5 years	6-15 years	-.19294	.14097	.700	-.5918	.2059
	16-26 year	-.35294	.11947	.055	-.7111	.0053
	27 and more	-.35294	.11947	.055	-.7111	.0053
6-15 years	less than 5 years	.19294	.14097	.700	-.2059	.5918
	16-26 year	-.16000	.07483	.231	-.3745	.0545
	27 and more	-.16000	.07483	.231	-.3745	.0545
16-26 year	less than 5 years	.35294	.11947	.055	-.0053	.7111
	6-15 ye ars	.16000	.07483	.231	-.0545	.3745
	27 and more	.00000	.00000	.	.0000	.0000
27 and more	less than 5 years	.35294	.11947	.055	-.0053	.7111
	6-15 years	.16000	.07483	.231	-.0545	.3745
	16-26 year	.00000	.00000	.	.0000	.0000

Since there is a non-homogenous variance of work experience, we use the Tamhane T^2 test to compare the influence of deferent groups of work experience on job satisfaction. As it can be seen from Table 2, some probabilities have value 0.055 meaning that the group of less than 5 years and the group of 16-26 years have a different influence on job satisfaction at significant level 0.1 also the group of less than 5 years and the group of 27 years.   As can be seen from the mean difference, the longer the work experience, the more satisfied participants are with their job. However, after certain years of work experience, there is no difference in job satisfaction since the mean difference of 16-26 years and 27 years and more are close to zero.

According to Table 3, we find their salary per year does not have any significant impact on job satisfaction. It is easy to understand that teachers choose their job because of their personal preference in this profession instead of a high salary. It is possible to get the probability which is equal to 0.047 value and it depicts that men and women have a different view on job satisfaction and their qualification hasn`t had a different effect on job satisfaction (These results are not listed in this paper due to the limitation of space) Surprisingly, men prefer the job of college teachers to that of women. After in-depth research, it is found that women usually spend more time at looking after their kids and their families, while men spend very little time so they can concentrate more on their research and enjoy what they study on.

Table 3. Salary per year comparisons according to Tamhane T^2 test

(I) salary per year	(J) salary per year	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Lower Bound
less then 100 000	100 000 - 150 000	.04092	.10203	.690	-.1630	.2449
	150 000 - 200 000	-.17647	.19976	.380	-.5758	.2228
	200 000-250 000	-.17647	.22760	.441	-.6314	.2785
	250 000 - 300 000	-.17647	.22760	.441	-.6314	.2785
100 000 - 150 000	less than 100 000	-.04092	.10203	.690	-.2449	.1630
	150 000 - 200 000	-.21739	.20472	.292	-.6266	.1918
	200 000-250 000	-.21739	.23198	.352	-.6811	.2463
	250 000 - 300 000	-.21739	.23198	.352	-.6811	.2463
150 000 - 200 000	less than 100 000	.17647	.19976	.380	-.2228	.5758
	100 000 - 150 000	.21739	.20472	.292	-.1918	.6266
	200 000-250 000	.00000	.28863	1.000	-.5770	.5770
	250 000 - 300 000	.00000	.28863	1.000	-.5770	.5770
200 000-250 000	less than 100 000	.17647	.22760	.441	-.2785	.6314
	100 000 - 150 000	.21739	.23198	.352	-.2463	.6811
	150 000 - 200 000	.00000	.28863	1.000	-.5770	.5770
	250 000 - 300 000	.00000	.30856	1.000	-.6168	.6168
250 000 - 300 000	less than 100 000	.17647	.22760	.441	-.2785	.6314
	100 000 - 150 000	.21739	.23198	.352	-.2463	.6811
	150 000 - 200 000	.00000	.28863	1.000	-.5770	.5770
	200 000-250 000	.00000	.30856	1.000	-.6168	.6168

Considering that the satisfaction variable is categorical, it is better to use a logistical regression model instead of the general regression model. According to the correlations of explanatory variables, we ignore the work experience since there is a high correlation between age and work experience which is equal to 0.765 The result of the Logistic model can be seen below (Since the constant in the model is not significant, we remove it).

Table 4 Logistic model

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	gender	-.604	.801	.567	1	.451	.547
	Work experience	1.420	.604	5.532	1	.019	4.139

a. Variable(s) entered on step 1: gender, work experience.

From the results of this questionnaire it is shown that work experience has a significant influence on job satisfaction. Table 4 shows that people with different work experience have various opinions. Generally speaking, the longer the work experience, the more satisfied the respondents feel. Meanwhile, gender as a factor has no significant effects on job satisfaction since the probability 0.201 is large than 0.05, that means although men and women differ in job satisfaction, gender is not an important factor of job satisfaction. The accuracy of the Logistic model is 84% so the model is reliable.

Motivation factors are of our greatest concern. Five options are given to choose in reference to the basis of existing literature and we use 0-1 to indicate whether this option has been selected or not. In Table 5 which is present below it is clear that most teachers and professors are eager to raise their salary. Although in general the salary of teachers and professors is not high enough, I can agree that some professors have a high salary.

All in all, the most preferable answer was to "raise your salary" which accounts for 68.7% of respondents and most of them are under 30 or 40 years. This is easy to understand because at this age there is a lot of financial burdens, such as buying a house, buying a car, raising children and so on. Not surprisingly, 86% of participants would go abroad to improve their knowledge and skill. In my perspective, one of the reasons for this is due to the low salary. Although they are satisfied with their job, the fact of low wages really puts a lot of pressure on them. If the government can raise their salaries, they will be more motivated to work instead of changing jobs. Furthermore, 49.3% of all respondents think that support in the education system and improve educational status is one of the most important things in motivation and the other half think the educational status is good. About 91% of all respondents neglect a strict evaluation mechanism and only 6 teachers hope to enforce evaluation criteria. Only 20.9% of all think to relax an evaluation mechanism can make people reduce stress and become more productive, while others think the current evaluation mechanism is suitable. Our suggestion is that the government raises salaries to increase teacher motivation levels and continue to apply the current evaluation method.

Table 5 Descriptive Statistics

	frequency	Mean	Std. Deviation
Relax assessment mechanism		.2121	.41194
Value .00	53		
1.00	14		
Strict evaluation mechanism		.0909	.28968
Value .00	61		
1.00	6		

Rise your salary		.6818	.46934
Value .00	21		
1.00	46		
Support education and improve educational status		.5000	.50383
Value .00	34		
1.00	33		

5. CONCLUSION

In this paper, we demonstrate that the motivation of teachers and professors as employers is a very important factor which should be paid more attention. According to the findings of this research, salary levels are one of the most important factors, which can motivate and inspire almost all employees, while others prefer to keep the current evaluation mechanism. In addition, a strict evaluation system does not give a favorable result in improving motivation. Furthermore, according to the logistic regression, this research finds that the group of people whose age is above 46 are more satisfied with their job and work experience has a significant impact on job satisfaction. In order for teachers to stay in this field longer and produce more output, our suggestion is that the government raises salaries to increase teacher motivation levels and continue to apply the current evaluation method

6. ACKNOWLEDGMENTS

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