An Empirical Research on the Status Quo of Ideological and Political Teachers in Higher Vocational Colleges in Hainan Province

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Abstract. In order to build a high-quality team of teachers in vocational higher education institutions, deeply understand, and investigate the current situation of ideological and political teachers in vocational higher education institutions of Hainan Province, a questionnaire survey has been conducted from four aspects including the satisfaction of teaching and scientific research, professional quality, work saturation and teacher's job satisfaction. On the basis of an empirical research upon the results through SPSS, it has come to the conclusion: the professional quality of ideological and political teachers cannot significantly influence the satisfaction of teaching and scientific research; Job saturation can positively influence teaching and research satisfaction; teaching and research satisfaction can positively influence teachers' job satisfaction. Vocational higher education institutions should attach great importance to teachers' development needs and respond to them, formulate policies to support teachers' professional development, their promotion of professional title and further training, and improve the quality and level of teachers.

Keywords: Higher vocational colleges · Ideological and political courses · Teacher · Empirical research

1 Introduction

As a significant part of higher education, higher vocational education aims to cultivate high-skilled talents for the first-line positions of production, construction, management and service. The talent cultivation quality in higher vocational college is not only related to the existence and development of a school, but also influences the social and economic development of a country. It has become an instant historical mission for higher vocational education to speed up the cultivation of high-quality and high-skilled talents. Strengthening the construction of teaching staff is not only a special requirement for higher vocational education, but also an inevitable demand for the times as well as the social and economic development. "Some Advice on Deepening the Educational Reform in Vocational Education and Improving the Quality of Talent Cultivation (exposure draft)" conducted by Ministry of Education has clearly mentioned "Reinforce and improve the teaching of basic socializing courses. Strengthen the cultural and basic education while guaranteeing the cultivation quality of students' technical skills. On the basis of teaching programme (curriculum standards) issued by

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Ministry of Education, vocational schools should provide abundant, complete and first-class basic socializing courses for students, including moral education, Chinese, mathematics, English, history, sports and health, art, basics and professional theories of computer application." Thus, the status of ideological and political course in higher vocational colleges has been intensified by the state. Thus, the construction of teaching staff for ideological and political course is especially important, and the professional development of teaching staff for basic socializing courses is the key to improve the teaching quality and cultivate talents' social adaptation ability in higher vocational education.

At present, the systematic study on teaching staff construction of ideological and political course in higher education institutions is far from many, and these researches are mainly conducted from the following aspects, including the structure of teaching staff [1, 2], teachers' academic competence [3, 4], teachers' basic quality [4], job satisfaction [5–8], professional development [9–11], job burnout [12, 13], etc. A questionnaire survey was conducted on ideological and political teachers in higher vocational colleges in Haikou, Sanya and Qionghai, in order to know the current situation of these teachers in Hainan higher vocational colleges.

2 Statistic Analysis of Data Description

Through the frequency analysis of demographic variables, a conclusion has been drawn as shown in Table 1. Among the 51 test samples, there are 39 females, accounting for 60%. 27 participants are aging 31 to 40, accounting for 52.9%. About 27 participants have postgraduate education background, accounting for 52.9%; 31 participants have master's degree, accounting for 60.8%. 24 teachers get lectureship as professional qualification, accounting for 47.1%. 47 participants are full-time teachers, accounting for 92.2%; 7 participants are double-professionally-titled teachers, accounting for 13.7%. In the recent three years, 23 participants published 1–3 papers, accounting for 45.1%; 22 participants are not the leading researcher of any teaching and scientific projects, accounting for 43.1%; 25 participants hosted 1 or 2 research projects, accounting for 49%; 23 teachers participate in 1 or 2 research projects, accounting for 45.1%. In the recent year, the average weekly class hours for 24 participants are between 8 and 12, accounting for 47.1%. 49 participants adopt information-based teaching, accounting for 96.1%; 19 participants think it is difficult for ideological and political teachers to get a raise in liberal wages and benefits, as well as get promotion, training and learning opportunities, accounting for 37.7%; while 30 participants think they are treated almost the same as teachers of other courses in these aspects.

The frequency statistics of multiple choices are shown in Table 2. Among the 49 samples adopting information-based teaching, the main information-based teaching method used in class is mixed teaching method, about 40.20% of the teachers choosing this option, followed by on-line and off-line teaching, about 24.10% of the teachers choosing this option. The rest options are also chosen by some teachers. Thus, the teaching methods used by ideological and political teachers in Hainan Province have transformed from traditional to information-based and diversified. The information-based teaching methods are also diversified.

Table 1. Frequency statistics (N = 51)

Variables	Attribute	Frequency	Percentage (%)
Gender	male	12	23.5
	female	39	76.5
Age	below 30	8	15.7
	31–40	27	52.9
	41–50	13	25.5
	51–60	2	3.9
	Above 60	1	2
Education background	undergraduate	17	33.3
	postgraduate	27	52.9
	Doctor	7	13.7
Degree	bachelor	13	25.5
	master	31	60.8
	doctor	7	13.7
Professional qualifications	professor	5	9.8
	associate professor	11	21.6
	lecturer	24	47.1
	teaching assistant	6	11.8
	no qualification	5	9.8
Full-time teacher	yes	47	92.2
	no	4	7.8
Double-professionally-titled teacher	yes	7	13.7
	no	44	86.3
Number of papers published in recent 3 years	none	5	9.8
	1–3	23	45.1
	4–5	11	21.6
	>5	12	23.5
Number of teaching and scientific research projects presided in recent 3 years	none	22	43.1
	1–2	25	49
	3–4	2	3.9
	above 4	2	3.9
Number of teaching and scientific research projects participated in recent 3 years	none	13	25.5
	1–2	23	45.1
	3–4	8	15.7
	above 4	7	13.7
Average weekly teaching hours in the recent year	below 8 h	11	21.6
	8–12 h	24	47.1
	13–16 h	11	21.6
	above 16 h	5	9.8
Using information-based teaching	yes	49	96.1
	no	2	3.9

(*continued*)

Table 1. (*continued*)

Variables	Attribute	Frequency	Percentage (%)
Liberal wages and benefits, opportunities for promotion, training and further-study	relatively difficult	19	37.3
	average	30	58.8
	relatively easy	2	3.9

Table 2. Frequency statistics of multiple choices (N = 49)

Variables	Attribute	Frequency	Percentage
Main information-based teaching method	MOOC	13	14.90%
	SPOC	2	2.30%
	Micro-lecture	5	5.70%
	Flipped class	11	12.60%
	On-line and off-line teaching	21	24.10%
	Mixed teaching	35	40.20%

The description statistics of the current situation of teaching staff is shown in Table 3. All the items are rated on a 5-point format, with 3 points the median. As shown in the table, the number of teachers and the teaching and scientific research funds for ideological and political course are relatively in short supply; teachers aging 30 to 45 are relatively in large quantity; the working environment for ideological and political teachers is relatively good, but the policy environment for them to publish a paper is not so satisfactory; the further-study and training opportunities for ideological and political teachers are relatively few, and the salary and social benefits are relatively low; the possibility for teachers to apply for research project related to ideological and political courses is relatively low; teachers are not satisfied with the reward system for publishing a researching paper, no matter it is a paper related to educational reform or scientific research.

Table 3. Description statistics of the current situations of ideological and political teachers

Items	Option for 1 point	Option for 5 points	Average	Standard deviation
Number of teachers	Very few	Very many	2.670	0.739
Working environment	Very bad	Very good	3.180	0.740
Frequency of further-study	Very low	Very high	2.840	0.644

(*continued*)

Table 3. (*continued*)

Items	Option for 1 point	Option for 5 points	Average	Standard deviation
Salary and social benefits	Very low	Very high	2.750	0.659
Number of teacher aging 30 to 45	Very few	Very many	3.490	0.857
Expenditure for teaching and scientific research of ideological and political course	Very little	Very much	2.880	0.765
Difficulty in applying for a research project related to ideological and political course	Very difficult	Very easy	2.530	0.784
Policy environment to publish a paper	Very bad	Very good	2.550	0.808
Reward system for publishing a paper related to educational reform	Very unsatisfied	Very satisfied	2.710	0.855
Reward system for publishing a paper related to scientific research	Very unsatisfied	Very satisfied	2.800	0.800

3 Reliability and Validity Test

Factor analysis [14] is used to respectively analyse teaching and scientific research satisfaction, professional quality, working saturation, and teachers' job satisfaction. By using single factor test, Tables 4 and 5 report the first factor analysis results of each variable. Only the explained variance of teachers' job satisfaction reaches 66.375%, while that of the rest variables is less than 50%. The factor loading value for teaching and scientific research satisfaction 4, professional quality 6, working saturation 1 are all less than 0.5. So, these items are excluded and factor analysis is used on the rest items again. In the second factor analysis, professional quality 3 and 4 are also excluded due to their low explained variance.

Table 4. Result of the first factor analysis

Variables	KMO value	Bartlett sphericity test			Characteristic root	Explained variance (%)
		Approximate chi-square	df	p		
Teaching and scientific research satisfaction	0.757	56.348	15	0.000	2.553	42.554
Professional quality	0.639	72.812	15	0.000	2.525	45.084
Working saturation	0.756	79.448	15	0.000	2.859	47.653
Job satisfaction	0.818	117.842	10	0.000	3.319	66.375

Table 5. Factor loading of first factor analysis

Index	Factor loading	Index	Factor loading	Index	Factor loading	Index	Factor loading
Teaching and scientific research satisfaction 3	0.775	Professional quality 2	0.828	Working saturation 2	0.792	Teachers' job satisfaction 5	0.865
Teaching and scientific research satisfaction 2	0.75	Professional quality 4	0.813	Working saturation 4	0.775	Teachers' job satisfaction 4	0.816
Teaching and scientific research satisfaction 1	0.75	Professional quality 1	0.715	Working saturation 5	0.772	Teachers' job satisfaction 2	0.815
Teaching and scientific research satisfaction 6	0.665	Professional quality 5	0.569	Working saturation 3	0.72	Teachers' job satisfaction 3	0.811
Teaching and scientific research satisfaction 5	0.62	Professional quality 3	0.513	Working saturation 6	0.718	Teachers' job satisfaction 1	0.764
Teaching and scientific research satisfaction 4	0.025	Professional quality 6	0.282	Working saturation1	0.044		

Tables 6 and 7 report the final results of factor analysis, and none index of teachers' job satisfaction isn't excluded. As shown in Table 6, the KMO value of teaching and scientific research satisfaction, professional quality, working saturation and teachers' job satisfaction are all above 0.6, and Bartlett sphericity test reaches 0.001, suggesting factor analysis can be used on these samples. The number of factors with the characteristic root above 1 is 1, and the explained variance of each single factor are all above 50%. As for factor loading, each index is above 0.5, suggesting that the single factor structure of teaching and scientific research satisfaction, professional quality, working saturation and teachers' job satisfaction is good, that is, the construct validity is good.

Table 6. Result of the final factor analysis

Variables	KMO value	Bartlett sphericity test			Characteristic root	Explained variance (%)
		Approximate chi-square	df	p		
Teaching and scientific research satisfaction	0.780	53.759	10	0.000	2.553	51.057
Professional quality	0.654	50.617	3	0.000	2.127	70.888
Working saturation	0.786	76.241	10	0.000	2.858	57.159
Job satisfaction	0.818	117.842	10	0.000	3.319	66.375

Reliability test is used on teaching and scientific research satisfaction, professional quality, working saturation and teachers' job satisfaction, and Table 8 reports the result. As shown in Table 8, the Cronbach's α coefficient of teaching and scientific research satisfaction, professional quality, working saturation and teachers' job satisfaction are all above 0.7, suggesting good reliability.

Table 7. Factor loading of final factor analysis

Index	Factor loading	Index	Factor loading	Index	Factor loading	Index	Factor loading
Teaching and scientific research satisfaction 3	0.776	Professional quality 2	0.896	Working saturation 6	0.795	Teachers' job satisfaction 3	0.865
Teaching and scientific research satisfaction 6	0.75	Professional quality 1	0.872	Working saturation 3	0.775	Teachers' job satisfaction 4	0.816
Teaching and scientific research satisfaction 5	0.748	Professional quality 5	0.75	Working saturation 2	0.772	Teachers' job satisfaction 2	0.815
Teaching and scientific research satisfaction 2	0.665			Working saturation 4	0.718	Teachers' job satisfaction 1	0.811
Teaching and scientific research satisfaction 1	0.621			Working saturation 5	0.718	Teachers' job satisfaction 5	0.764

Table 8. Results of reliability and validity test

Variables	Cronbach's α coefficient	Index number
Teaching and scientific research satisfaction	0.757	5
Professional quality	0.794	3
Working saturation	0.811	5
Job satisfaction	0.870	5

4 Correlation Analysis

Description statistics and correlation analysis are used to analyse the four variables including teaching and scientific research satisfaction, professional quality, working saturation and teachers' job satisfaction, and Table 9 reports the result. The result of description statistics shows that the average value of each variable is above 3, suggesting that the participants' teaching and scientific research satisfaction, professional quality, and job satisfaction are relatively high. The average value of working saturation is a little bit lower but quite close to 3, suggesting that the working saturation of the participants is in medium level. The result of correlation analysis shows that in the four variables, there are obvious correlation between each two variables.

Table 9. Description statistics and correlation analysis

	Teaching and scientific research satisfaction	Professional quality	Working saturation	Job satisfaction
Teaching and scientific research satisfaction	1			
Professional quality	0.549***	1		
Working saturation	0.579***	0.451**	1	
Job satisfaction	0.743***	0.639***	0.765***	1
Mean value (M)	3.012	3.399	2.984	3.031
Standard deviation (SD)	0.563	0.640	0.623	0.608

Note: * stands for $p < 0.05$, **stands for $p < 0.01$, ***stands for $p < 0.001$.

5 Regression Analysis

Regression analysis [15] is used to explore the influence of professional quality on teaching and scientific research satisfaction, and the result is shown in Table 10. As shown in Table 10, the regression equation is significant ($F = 21.160$, adjusted $R2 = 0.287$, $p < 0.001$), suggesting that professional quality has a significant positive influence on teaching and scientific research satisfaction ($\beta = 0.549$, $t = 4.6$, $p < 0.001$).

Table 10. Regression analysis of professional quality to teaching and scientific research satisfaction

	Nonstandard coefficient B	Standard error (S.E.)	Standard coefficient β	t	p
(constant quantity)	1.367	0.364		3.76***	0.000
Professional quality	0.484	0.105	0.549	4.6***	0.000
R^2	0.302				
Adjusted R^2	0.287				
F	21.160***				

Regression analysis is used to explore the influence of working saturation on teaching and scientific research satisfaction, and the result is shown in Table 11. As shown in Table 11, the regression equation is significant ($F = 24.725$, adjusted $R2 = 0.322$, $p < 0.001$), suggesting that working saturation has a significant positive influence on teaching and scientific research satisfaction ($\beta = 0.579$, $t = 4.972$, $p < 0.001$).

Table 11. Regression analysis of working saturation to teaching and scientific research satisfaction

	Nonstandard coefficient B	Standard error (S.E.)	Standard coefficient β	t	p
(constant quantity)	1.45	0.321		4.519***	0.000
Working saturation	0.523	0.105	0.579	4.972***	0.000
R^2	0.335				
Adjusted R^2	0.322				
F	24.725***				

Regression analysis is used to explore the influence of teaching and scientific research satisfaction on teachers' job satisfaction, and the result is shown in Table 12. As shown in Table 12, the regression equation is significant ($F = 60.506$, adjusted $R2 = 0.543$, $p < 0.001$), suggesting that teaching and scientific research satisfaction has a significant positive influence on teachers' job satisfaction ($\beta = 0.743$, $t = 7.779$, $p < 0.001$).

Table 12. Regression analysis of teaching and scientific research satisfaction to teachers' job satisfaction

	Nonstandard coefficient B	Standard error (S.E.)	Standard coefficient β	t	p
(constant quantity)	0.614	0.316		1.942	0.058
Teaching and Scientific Research Satisfaction	0.803	0.103	0.743	7.779***	0.000
R^2	0.553				
Adjusted R^2	0.543				
F	60.506***				

6 Conclusion

Through the empirical analysis of questionnaire, it is obvious that personal profession quality of ideological and political teachers in higher vocational colleges in Hainan province can not significantly influence their teaching and scientific research satisfaction, and their working saturation has a significant positive influence on their teaching and scientific research satisfaction; and the latter can directly influence their job satisfaction. As a special teaching group, ideological and political teachers take up a certain proportion in the whole teaching group of higher vocational education, and their working conditions including their professional quality, teaching and scientific research satisfaction, job satisfaction and job burnout have a great influence on the development of higher vocational colleges. Therefore, it is necessary for higher vocational colleges to clearly know the special function of training for vocational education teachers. They should reply to teachers' requirements, perfect the content and process design of teaching staff training. They should create good working environment, provide more training and further-study opportunities for ideological and political teachers, and better the rules and regulations of teaching and scientific research as well as formulate policies beneficial to their development. Usually, ideological and political teachers in higher vocational colleges have a strong desire for promotion, and their teaching and scientific research satisfaction not only influences their job satisfaction, but also influences their professional career development and job burnout. It is also crucial on the construction and development of a high-quality teaching group.

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