

Relationship among Work Values, Job Satisfaction and Work Engagement of Primary and Secondary School Teachers by SPSS 24.0

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Abstract. In the information age, the pressure of information technology will bring more anxiety and frustration, and even lead to teachers' work burnout and inhibit their work engagement. Objective/Significance: To explore the relationship between primary and secondary school teachers' work engagement, work values and job satisfaction, so as to better guide primary and secondary school teachers to actively engage in work and promote the development of basic education. Process/Method: 262 primary and secondary school teachers in northern Guangdong were investigated by using the work engagement Scale, Work Values Scale and Job Satisfaction Scale. SPSS was used to conduct descriptive statistics, t test, F test, correlation analysis and regression analysis of the results. Results/Conclusions: The work engagement of primary and secondary school teachers was generally at an above average level, and the average scores of each dimension were dedication, concentration and vitality from high to low. There are significant differences among primary and secondary school teachers in vitality, dedication and work engagement. There are significant differences among primary and secondary school teachers in the total scores of dedication, concentration and work engagement. There are significant differences in the total score of vitality and work engagement. There is a significant positive correlation between teachers' work engagement, work values and job satisfaction. Job satisfaction plays a partial mediating role between work value and work engagement.

Keywords: work values, job satisfaction, work engagement, primary and secondary school teacher

1 Introduction

With the expansion of the study of positive psychology in the psychology circle and the attention of organizational behavior to the work incentive mechanism, more and more scholars have begun to shift from the traditional psychological research paradigm that pays too much attention to the negative aspects such as disease and pain to the positive aspects, and study the work engagement from the perspective of positive psychology[1]. Work engagement was first proposed by Kahn, and it is generally recognized by Schaufeli et al that "Work engagement refers to a complete working state of an individual in work, which is manifested by three characteristics: vitality, dedication and concentration"[2]. This is a positive and perfect emotional and cognitive state related to work, as well as a positive and fulfilling mental state[3]. Work value is a stable, generalized and dynamic belief system that people treat work, work behavior and work results according to their own and social needs, including a series of

concepts from professional ethics to work orientation[4]. Job satisfaction is a kind of emotional cognition state of workers towards their work and occupation as well as working conditions and conditions[5].

Primary and secondary school teachers are the backbone of the development of basic education. As primary and secondary school students have the characteristics of cognitive childism, poor emotional adjustment and low degree of socialization, the particularity, complexity and high pressure of primary and secondary school teachers' work are determined[6]. Teachers play multiple roles in their work. They are not only the enlighten and organizer of knowledge, but also the carer and nurturer of psychology in primary and secondary school life. Their working status will affect the healthy growth of students and the recognition of the society to teachers, which is related to the long-term development of basic education cause. Existing studies have shown that teachers' job satisfaction not only affects teachers' work engagement, work enthusiasm and initiative, but also affects teachers' mental health[7]. The higher the degree of individual work engagement, the more beneficial it is to reduce job burnout and other occupational stress symptoms, and improve life happiness[8]. Therefore, this paper aims to explore the relationship between work engagement, work values and job satisfaction of teachers on the basis of existing research, so as to better guide teachers to actively engage in work and promote the development of basic education.

2 Objects and methods

2.1 Research object

Random sampling method was adopted to select 300 primary and secondary school teachers as research objects. A total of 300 questionnaires were sent out, and 265 valid questionnaires (88.33%) were recovered. Among them, there were 154 teachers (58.11%) in urban primary and middle schools and 111 teachers (41.89%) in rural primary and middle schools; 99 (37.36%) have college degree, 153 (57.74%) have bachelor degree, 13 (4.91%) have master degree or above. 75 students (28.30%) had been teaching for 1-5 years, 151 students (56.98%) had been teaching for 6-10 years, and 39 students (14.72%) had been teaching for ≥ 11 years. There were 124 homeroom teachers (46.79%) and 141 non-homeroom teachers (53.21%). There were 134 public schools (50.57%) and 131 private schools (49.43%).

2.2 Research tool

Work engagement Scale for primary and secondary school teachers. The scale of work engagement for primary and secondary school teachers was developed by referring to the scale of work engagement of Wang Zhen et al.[9]. There are 17 items in the scale, which are divided into three dimensions: vitality, dedication and concentration. The 5-point scoring method is adopted, and 1-5 points are assigned from "very inconsistent" to "very consistent". The higher the score is, the higher the level of work engagement of teachers is. The Cronbach α coefficient of the scale was 0.95, indicating good reliability.

Work Values Scale for primary and secondary school teachers. Adopt the work values scale proposed by Hou Xuan Fang et al.[10], and revise the specific expression according to this research direction. The scale includes five dimensions, namely utilitarian orientation,

intrinsic preference, interpersonal harmony, innovation orientation and long-term development, with a total of 20 items. The scoring method is based on a 5-point scale, ranging from "very unimportant" 1 to "very important" 5. The Cronbach 'α coefficient of the scale was 0.95, indicating good reliability.

Job Satisfaction Scale for primary and secondary school teachers. Zhang Xiaoning et al.[11] Job satisfaction scale was adopted, and the specific expression was slightly modified according to the research direction. The scale consists of 18 items, including three dimensions of situational factors within the organization, outcome factors and personal factors. The scale is scored with 5 points, from "very inconsistent" 1 to "very consistent" 5. The higher the score is, the higher the job satisfaction of teachers is.

2.3 Data analysis method

SPSS24.0 software package was used for statistical analysis of the data. The main statistical methods included independent sample t test, one-way analysis of variance, Pearson correlation analysis and regression analysis, and $P < 0.05$ was considered statistically significant.

3 Results

3.1 The work engagement of primary and secondary school teachers

Overall, the work engagement of primary and secondary school teachers was at an above average level (3.52 ± 0.61), and the average scores of each dimension were dedication (3.77 ± 0.62), concentration (3.54 ± 0.66) and vitality (3.28 ± 0.69).

The results of independent sample t test and one-way analysis of variance showed that there were significant differences in the total scores of vitality, dedication and work engagement of primary and secondary school teachers in different places, and the scores of urban teachers were higher than those of rural teachers. The scores of private primary and secondary school teachers were significantly higher than those of public primary and secondary school teachers. Homeroom teachers scored significantly lower than ordinary teachers in the sub-dimensions of work engagement and vitality. See Table 1.

Table 1. Analysis of mean difference of work engagement of teachers ($M \pm SD$)

variable	<i>N</i>	vigour	dedication	focus	work engagement	
town	154	19.97±4.06	19.09±3.04	21.42±3.91	60.42±9.72	
location	rural area	111	17.65±4.27	17.45±3.09	20.129±4.418	55.26±10.60
	<i>t</i>	2.99	2.72	1.69	2.77	
	<i>P</i>	<0.01	<0.01	>0.05	<0.01	
nature	Public Schools	134	19.54±3.93	18.41±3.22	20.74±4.41	58.90±10.08
	private school	131	19.94±4.45	19.49±2.75	22.08±3.63	61.43±9.60

	<i>t</i>		0.76	2.81	2.63	2.24
	<i>P</i>		>0.05	<0.01	<0.05	<0.05
head teacher	yes	124	19.11±4.02	18.553±2.957	21.291±3.934	58.819±9.666
	no	141	21.13±3.96	18.417±3.146	21.691±4.098	61.383±10.123
	<i>t</i>		3.95	1.05	1.80	2.89
	<i>P</i>		<0.01	>0.05	>0.05	<0.05

Note: ** means $P < 0.01$, * means $P < 0.05$, the same below.

3.2 The correlation analysis between work engagement and work values of primary and secondary school teachers

There were positive correlations between the scores of work engagement and the scores of work values and intrinsic preferences, interpersonal harmony, innovation orientation and long-term development of primary and secondary school teachers (all $P < 0.01$). See Table 2.

Table 2. The correlation coefficient between work engagement and work values

dimension	vigour	dedication	focus	work engagement
utilitarian orientation	0.088	0.054	0.051	0.074
intrinsic preference	0.355**	0.317**	0.323**	0.376**
interpersonal harmony	0.203**	0.256**	0.248**	0.263**
orientation of innovation	0.224**	0.193**	0.164**	0.219**
long-term development	0.241**	0.221**	0.276**	0.279**
work Values	0.316**	0.291**	0.294**	0.342**

3.3 The correlation analysis between work engagement and job satisfaction of primary and secondary school teachers

There was a positive correlation between work engagement and job satisfaction of primary and secondary school teachers ($P < 0.01$). See Table 3.

Table 3. Correlation between work engagement and job satisfaction

dimension	vigour	dedication	focus	work engagement
personal factors	0.577**	0.582**	0.522**	0.630**
result factors	0.611**	0.554**	0.528**	0.638**
contextual factors within the organization	0.579**	0.632**	0.544**	0.655**
job satisfaction	0.657**	0.667**	0.596**	0.718**

The mediating role of job satisfaction between work values and work engagement of primary and secondary school teachers was analyzed. In the first step, the regression equation of work engagement (Y) to work values (X) was established, that is, the work values were taken as the

predictive variable and the work engagement as the dependent variable. The regression equation was $Y=0.365X+30.313$. The second step was to establish the regression equation between job satisfaction (W) and work value (X), that is, the work value was taken as the predictive variable and the job satisfaction was taken as the dependent variable for regression analysis. The regression equation was $W=0.388X+31.144$. The third step was to establish the regression equation of work engagement (Y) to work values (X) and job satisfaction (W), that was, the regression analysis was carried out with work values and job satisfaction as predictive variables and work engagement as dependent variable, and the regression equation was $Y=0.115X+0.642W+10.303$.

It is assumed that job satisfaction plays a mediating role between work values and work engagement. The results show that work values can significantly predict work engagement, and when the mediating variable job satisfaction is introduced into the equation, the variance that can be explained increases significantly, indicating that job satisfaction plays a mediating role between work values and work engagement. In other words, when the work values of middle and primary school teachers are realized, the high job satisfaction of the intermediary variable will improve the level of work engagement, and vice versa. See Table 4.

Table 4. The mediating effect of job satisfaction on work value and work engagement (n=265)

step	predictive variable	dependent variable	regression equation	R	R ²	Beta	t	P
Step 1	work values	work engagement	$Y = 0.365X + 30.313$	0.340	0.115	0.340	5.90	<0.01
Step 2	work values	job satisfaction	$W = 0.388X + 31.144$	0.340	0.116	0.340	5.91	<0.01
Step 3	work values	work engagement	$Y = 0.115X$	0.726	0.527	0.107	2.39	<0.05
	job satisfaction		$+0.642W$			0.683	15.23	<0.01
			$+10.303$				2.63	<0.01

4 Analysis and Discussion

4.1 The level of primary and secondary school teachers' work engagement

The results show that urban primary and secondary school teachers score higher than rural primary and secondary school teachers in the total score of work involvement, vitality and dedication factor. On the one hand, urban job competition is fierce, the implementation of reward and punishment system is strict management, the society and schools have higher expectations and requirements for teachers. On the other hand, urban teachers have clear career development plans and have higher requirements for their own work engagement.

It is found that the level of work engagement of private primary and secondary school teachers is higher than that of public primary and secondary school teachers, which is consistent with the research results of Wang Yanfeng et al. [12] and Sun Guilin [13], but inconsistent with the

research results of Li Yongzheng [14]. This may be because most private schools adopt a strict enterprise management mode, in which survival of the fittest is eliminated. If teachers have a low level of work engagement, their assessment results will be affected and they will face the risk of being eliminated. This high-intensity management mode stimulates the work motivation of primary and secondary school teachers.

The results showed that there were significant differences in the total score of work involvement and the sub-dimensions of vitality, and the score of class teachers was higher than that of ordinary teachers. In addition to their own work, homeroom teachers spend a lot of time and energy on trivial and meticulous class management compared with ordinary teachers. The heavy trivial work makes homeroom teachers less enthusiastic about work and less energetic [15].

4.2 The correlation among work engagement, job satisfaction and work values of primary and secondary school teachers

This study shows that there is a significant correlation between teachers' work engagement and its dimensions, job satisfaction and factors, which is consistent with the research results of Wang Dan [16] and Wu Weijiong et al. [17]. When teachers feel more satisfied with the work environment, treatment, sense of accomplishment and other factors, they will be more likely to identify with their work and devote themselves to it. Primary and secondary school teachers with higher job satisfaction will find their own values and interest points in work and show themselves in their roles. Compared with teachers with low job satisfaction, they are more likely to perceive positive factors in work and have higher work engagement [18].

The research shows that there is a significant positive correlation between primary and secondary school teachers' work engagement, its dimensions and work values, which is consistent with the research results of Wei Hongtao et al. [19]. The work values of primary and secondary school teachers not only affect their career choice, but also their work attitude, work behavior and work performance [20]. If the work is in line with teachers' internal preferences, innovative ideas, long-term development plans, and has a good atmosphere of interpersonal relations, it can better promote their involvement in work. Similarly, with the continuous improvement of the level of work involvement, teachers' sense of work value is constantly enhanced, and they put forward innovation and challenge to the education work that adheres to the conventions. They have higher requirements for their work atmosphere and career development planning, and they are eager to realize their self-value in the education work

4.3 The mediating role of job Satisfaction in work values and work engagement

The results show that job satisfaction plays a partial mediating role between work values and job engagement of primary and secondary school teachers, that is, work values can not only directly affect job engagement, but also indirectly affect job engagement through the mediating role of job satisfaction. Individuals are more inclined to work in line with their own work values. Among primary school teachers, when the work values of utilitarian orientation, internal preference, interpersonal harmony and other aspects are satisfied, they will have a positive evaluation of the education work, and the job satisfaction will rise accordingly. When middle and primary school teachers are satisfied with their salary, working atmosphere and job prospects, they will enter a higher state of devotion to their own work. Therefore, in order

to improve the work engagement level of primary and secondary school teachers, on the one hand, it is necessary for primary and secondary school teachers to establish positive work values; on the other hand, it is necessary for the state, society and primary and secondary school levels to meet the work demands of primary and secondary school teachers as much as possible to improve their job satisfaction.

Acknowledgment. This work was financially supported by Fund Project: The Education Science Planning Project of Guangdong Province "Research on Influencing Factors and Intervention Strategies of Primary and Secondary School Teachers' Work Engagement in Northern Guangdong" (2017GXJK156).

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