

## Everyone is Creative? Research on the Relationship Between the Work Orientation and Employee Creativity

Huanrong Li<sup>1,a</sup>, Zhang Xing<sup>2,b</sup>, Yang Min<sup>3,c</sup> and Guoshun Liu<sup>4,d</sup>

<sup>1</sup>MBA Department of Guangdong University of Finance and Economics, Guangzhou, Guangdong, China

<sup>2,3,4</sup>Information Department of Guangdong University of Finance and Economics, Guangzhou, Guangdong, China

<sup>a</sup>1043778011@qq.com, <sup>b</sup>1148572764@qq.com, <sup>c</sup>1113277026@qq.com, <sup>d</sup>745170725@qq.com

**Keywords:** Work Orientation; Engagement; Competitive Work Environment; Employee creativity

**Abstract.** Building on intrinsic motivation theory and learned industriousness theory, this study examines the relationship between work orientation and employee creativity, and tests the mediator of engagement and the moderator of the competitive work environment. Based on the samples of 280 internet companies, we found that three major dimensions of the work orientation have a positive effect on engagement. Furthermore, engagement has a significantly positive correlation with employee creativity, as engagement plays a partially intermediary role between work orientation and employee creativity. Finally, competitive work environment (CWE) moderates the relationship between work orientation and engagement, which predicts the employee creativity. Among them, CWE positively moderates career orientation and calling orientation, while negatively moderates job orientation. The above theoretical conclusions will have a positive impact on how modern human resources manage employee creativity.

### 1 Introduction

Dynamic competition market and trade frictions of big countries have put forward a higher challenge to the adaptability of local enterprises. More and more entrepreneurs realize that innovation is the only choice for enterprises to survive. Many studies have proved that employee creativity has a positive effect on organizational innovation and job performance<sup>[1,2]</sup>. Therefore, under the severe competitive environment, the factors that affect the creativity of employees become a new hot spot. Previous studies have confirmed that personal factors (personality, motivation, etc.) contribute to the improvement of employee creativity<sup>[3,4]</sup>, however, the study on how individual factors affect employee creativity and the boundary mechanism is still insufficient. For example, it is generally believed that creative personality can positively affect the creativity of employees. However, some scholars have shown that the relationship between creative personality and employee creativity is not significant<sup>[5]</sup> and employees with creative personality may not be able to stimulate their creativity potential<sup>[6]</sup>. Previous studies have generally believed that employees' internal motivation plays an important role in their creativity. However, some scholars put forward the view that the relationship between intrinsic motivation and creativity is not significant<sup>[7,8]</sup>. Thus, the impact of personal factors on creativity is still worth pondering.

In the actual process, we can find that many well-known enterprises in China take some ways to improve their competitiveness, stimulate creativity and innovation performance, which leads to more competition among employees, longer working hours and more work intensity. For example, signing the "Agreement of the strivers" and setting up a 996 Work System. These high-intensity competitive environments make our enterprises corner overtaking, make a brilliant figure, and thus gain the recognition of many entrepreneurs. On the other hand, there are many high-tech enterprises believe that employees should work in a relaxed working environment, which is conducive to the integration of knowledge and the divergence of thinking. Many internationally renowned enterprises advocate the phenomenon of not to punch the clock at work or even bring pets to work

and so on. These two seemingly "extreme" organizational scenarios can help enterprises achieve long-term development, which leads to a wider discussion of society. These can't help but trigger some thinking: (i) whether the relationship between personal factors and creativity is regulated by a situational environment, which stimulates the inherent creative potential and improves the creativity of employees; (ii) According to trait activation theory, even the same environment can be changed by individual differences, so it is more scientific to make a reasonable distinction between different employees' influence on creativity.

According to the above theory and the actual situation, it can be found that the sensitivity of creativity of different types of employees is different, and the employees with different views on the work have different performance in the specific work, and may be affected by the contextual factors. The theory of creativity interaction model also confirms that creativity is the result of human and contextual interaction. In recent years, scholars have put forward work orientation from the perspective of individual expectation for work and subjective judgment, which emphasizes the individual's subjective view and purpose of work<sup>[9]</sup>, and divides the work orientation into three dimensions: job orientation, career orientation and calling orientation. Many studies have shown that it is necessary to continue to seek work meaning to gain a sense of happiness and satisfaction in an individual career, there is a close relationship between work orientation and job satisfaction, subjective well-being, positive feeling, engagement and work attitude during one's career<sup>[10,11,12]</sup>. Although scholars at home and abroad have made some progress on the work orientation, there are still some limitations. There are not many literatures to the employee creativity in relation to the work orientation, and the internal mechanism of the study is less. In addition, as competition exists widely in China, the research on the impact of competitive work environment variables on employee creativity is also in the blank stage. In view of the shortcomings of previous studies, this study aims to investigate the relationship between work orientation and creativity, and explore the moderating role of engagement and the adjustment mechanism of competitive work environment.

## **2 Literature Review and Research Hypothesis**

### **2.1 The Relationship Between Work Orientation and Employee Creativity**

Rooted in the individual's attitude towards work, cognition and subjective judgment, scholars use work orientation to interpret the relationship between individual and work. Work orientation is recognized by most scholars as three dimensions: Job orientation, career orientation and calling orientation. Job orientation represents the individual's belief that the relationship with work is a material exchange relationship, and the intrinsic motivation lies in the ability of work to be based on the corresponding material returns and economic income. While the career orientation represents the individual's belief that the purpose of the job is to gain career development, prestige, etc. and pursue a better path of promotion. Calling orientation emphasize the relationship between individual and job lies more in subjective achievement, meaning and dedication. It is not only the pursuit of economic income and position development, but also the intrinsic achievement and enrichment pleasure in the work. The empirical results show that the calling orientation individuals have better subjective initiative and greater job satisfaction than the first two<sup>[9]</sup>. At the same time, this is the orientation of the current research.

Although the work orientation is divided into three dimensions, some scholars emphasize that these three kinds of different subjective orientation of the work relationship are not completely independent. For example, the calling-oriented individual includes subjective achievement and work meaning as the main purpose of the work, it does not hinder the demand for material return and economic income. The orientation of work value is more emphasis on the relationship between individual and work, which is similar to work value, but still different. The work value refers to the belief and attitude that the laborer holds when dealing with the job choice, including utilitarian orientation, inner preference, interpersonal harmony, innovation orientation and long-term development<sup>[12]</sup> From this, we can see that the work orientation is more focused on the subjective

view and judgment of the individual and the social activities of work, and is divided according to the high and low levels, emphasizing the state and the reward of the work expectation, and have a strong sense of purpose.

Motivation theory holds that any individual's behavior is driven by motivation to meet different levels of needs. Motivation theory is subdivided into intrinsic motivation and extrinsic motivation. Intrinsic motivation focuses on learning itself and achieves happiness and satisfaction by doing something that is very similar to the calling-oriented individual on work. Calling orientation to enjoy the work itself, and willing to sacrifice time and energy for the work. The creativity of employees emphasizes the ability to propose novel and effective solutions for products or services, which requires a lot of time and effort. Extrinsic motivation is different from the intrinsic motivation of "I want to learn", more emphasis is placed on "want me to learn" and behavior is used as a means of achieving a goal. For example, when an individual holding job or career orientation considers the expectation of work to be economic, income and status, and promotion of a position. The motivation of work comes from work itself and the realization of self-expectation, and the higher the level of orientation, the clearer the sense of purpose and significance of work. Creativity is the core competitive power and internal driving force of an enterprise. In the process of stimulating the creativity of the employees, the management will do it in two ways: motivation and pressure (such as compensation rewards and evaluation system). For the pursuit of goals or expectations, individuals improve their awareness or behavior in terms of working time and working status. Empirical results also prove that performance compensation<sup>[13,14]</sup> and workplace stress<sup>[15,16]</sup> are inextricably linked to employee creativity. In addition, the theory of learned industriousness shows that human nature has a utilitarian side, when individual efforts at work are enticed by the reward of compensation or position, individuals are involved in a more positive state that affects work outcomes and reduces aversion generated by high efforts. At the beginning of the study, Amabile stressed that creativity is not only found in jobs with special requirements for creativity, but is widespread in the workplace. For example, in manufacturing, employees often offer more effective and innovative advice to improve efficiency and reduce costs. Therefore, the sense of purpose and attitude of employee to work can positively affect their creativity.

Based on this, this paper proposes the following assumptions:

Hypothesis1a: Job orientation is positively related to employee creativity;

Hypothesis1b: Career orientation is positively related to employee creativity;

Hypothesis1c: Calling orientation is positively related to employee creativity;

## **2.2 The Mediator of Engagement**

Dedication is particularly important to oriental culture, and regarded as the traditional virtue of the Chinese nation, and is included in the 24-character socialist core values, and second only to "patriotic". Engagement is defined as the positive, pleasant and focused work state of employees at work, and the characteristics of "serious absorption", "vigor" and "dedication". Engagement expressed and demonstrated the positive attitude of the staff on the three levels of physiology, cognition and emotion respectively. Empirical results show that engagement plays a positive role in improving organizational effectiveness. Therefore, the paper based on the relationship between the individual and the job, the positive attitude through physiological, cognitive and emotional levels may lead to positive job outcomes, such as employee creativity. In the empirical study, Peipei Tang explores the relationship between value orientation and innovation behavior, and shows that work orientation has a direct relationship with innovation behavior, among which career orientation and calling orientation have positive correlation with innovation behavior. Unfortunately, there is no study of whether there is an intermediary variable and what is the mediation variable[17]. After combing the literature, it is found that there are few researches on the combination of work orientation, engagement and employee creativity, but there are more researches on the concept of similarity or the relationship between them. Therefore, this paper inferred that there is a certain relationship between the three.

(i) The definition of work orientation indicates that although the three dimensions have different emphasis, they are not independent of each other. Individuals with career orientation and calling orientation still have a certain demand for material return. Therefore, from the physiological level, individuals may actively promote employee creativity through engagement. (ii) Intrinsic motivation, domain-related skills and processes be related to creativity are the three main factors that constitute creativity, among which intrinsic motivation is the most important. Each of the three major orientations of work value has its own intrinsic motivation. The intrinsic motivation of the job orientation employee is to obtain a material return and a position. Career orientation employee are more likely to have high position and high status, and calling orientation employee focus on work and enjoy the work itself. High orientation means a clearer relationship with work and a stronger internal motivation, which can maintain a vigorous and passionate mental state in the work, thus enhancing the creativity of employees. This positive state is measured in terms of engagement. (iii) Calling orientation has a strong expression of emotion, therefore, studies have found that calling orientation had higher job satisfaction and work well-being<sup>[11]</sup>. However, according to the theory of learned industriousness, employees improve their engagement for their own purposes (material rewards, job advancement, and self-achievement) and reduce the sense of disgust generated by effort at work. As a result, the clearer an individual's attitude toward the job is, the more likely it is to stimulate the positive emotional side of the job.

Based on this, this paper proposes the following assumptions:

Hypothesis2a: Job orientation is positively related to on engagement;

Hypothesis2b: Career orientation is positively related to engagement.

Hypothesis2c: Calling orientation is positively related to engagement;

Hypothesis3: Engagement mediates the relationship between work orientation and employee creativity;

### **2.3 Moderating Effects of Competitive Work Environment**

Competitive work environment is a concept proposed by western scholars Brown in a 1998 paper, is a relatively new concept. Competitive working environment is defined as a kind of mental state, this state of mind assumes that the rewards of the organization depend on the comparison between them and their colleagues<sup>[18]</sup>, at the same time individual motivation, needs, desires and other factors will affect the competitive work environment, such as some scholars empirical evidence shows that the competitive work environment be able to regulate individual's engagement level<sup>[19]</sup>. Later, Fletcher and Nusba Um identified five dimensions of competitive work environment<sup>[20]</sup>, namely tangible rewards, intangible rewards, recognition, status and competitive coworkers. Tangible rewards, such as performance bonuses, allowances and salaries, have monetary value. While intangible awards do not have direct monetary value, such as receiving a good job, gaining greater freedom and the right to choose. Recognition refers to formal or informal recognition of achievements, including recognition among colleagues, "my/colleague /department's achievements will be recognized only if my/colleague/department's performance is higher than others/department". And the status refers to the implicit or explicit ranking within the organization. Finally, even in the absence of a formal competitive reward system, the presence of competitive coworkers can lead employees to constantly seek to outperform each other, such as "everyone at work wants to do better than others".

At present, there are different views on the impact of competition on work results. Some scholars believe that a higher competitive work environment has a positive impact on job outcomes, and that building support relationships with peers and colleagues has a positive impact on engagement<sup>[21]</sup>. However, there are also scholars who suggest that the interaction between colleagues may not be beneficial or supportive, and that colleagues may be motivated only to be rewarded through competition<sup>[18]</sup>. Some scholars, such as Jones and Davis, have tested 345 samples from different firms and different industries in the empirical study. It is found that competitive work environment

is related to goal orientation and engagement. Competitive work environment positively interacted with the relationship between proving/learning goal orientation and engagement <sup>[22]</sup>. Therefore, the potential positive and negative effects of competitive work environment are open to question. Understanding the influence mechanism of work environment is helpful to understand the performance mechanism of employee creativity. Most studies related to the work environment focus on the level of environmental support or the level of resources required (e.g., a good work culture, strong organizational commitment), which has a positive impact on engagement. However, this type of study fails to explain the fact that the degree of competition in the work environment may different. According to the trait activation theory, it can be better explained that the difference result to employee in the same environment. We discuss from three dimensions.

(i) For individuals with a job orientation, they are more likely to pursue adaptive competition, in other words, they may withdraw from the task after completing their task. Because competitiveness must involve in comparing with other people, workers with job orientation will become more avoid competition. (ii) Individuals with higher level of career orientation will have stronger intrinsic motivation to participate in work role to gain new status and ability. In a competitive environment, learning new skills and abilities is expected to be promoted and often rewarded in some way. In other words, learning is also an extrinsic motivation. (iii) Calling orientation emphasizes that the relationship between people and work lies in subjective achievement, meaning and dedication. Although it will also pursue economic income and job development, it is far from the intrinsic enjoyment and fulfilling life style brought by work. In a more competitive environment, calling-oriented employees are more likely to feel "chasing each other" in the work of colleagues with different competitiveness, which is an inherent enjoyment. Therefore, the following assumptions are proposed:

Hypothesis4a: The competitive work environment will negatively moderate the relationship between job orientation and engagement, and the higher the level of competitive work environment, the weaker the positive relationship between job orientation and engagement;

Hypothesis4b: The competitive work environment will positively moderate the relationship between career orientation and engagement, and the higher the level of competitive work environment, the stronger the positive relationship between career orientation and engagement;

Hypothesis4c: The competitive work environment will positively moderate the relationship between calling orientation and engagement, and the higher the level of competitive work environment, the stronger the positive relationship between calling orientation and engagement;

Based on the summary of relevant research and theoretical derivation, this study proposes the following relationship model between work orientation and employee creativity, the research framework is shown in figure 1.

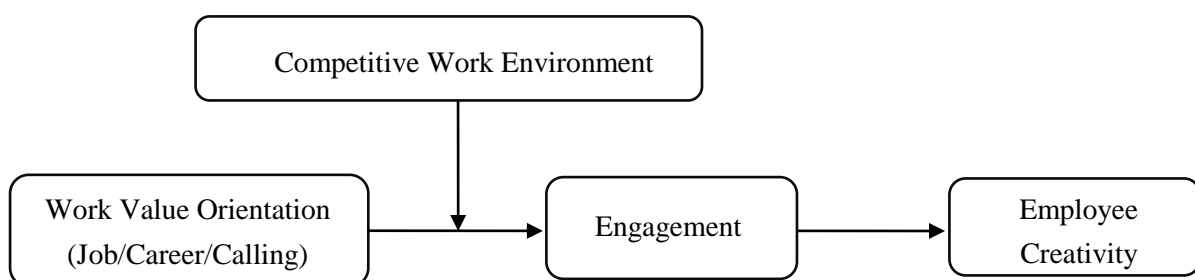


Figure 1. Research framework for work orientation and employee creativity.

## 3 Method

### 3.1 Sample

The current study collected questionnaires both online and offline forms in many famous cities in southern China. The scales mainly include four parts, work orientation, engagement, competitive work environment and employee creativity. According to the previous analysis and related literature review, the scales of variables such as work orientation, competitive work environment, and employee creativity all select foreign, which are more authoritative, well-trusted, and valid. For the foreign scales used in this study, the relevant professional researchers conducted two-way translations, and amendments were made to the sentences with large differences.

The current study was mainly aimed at employees in Guangzhou, Shenzhen, Shanghai, Ganzhou, Yichun and Chaoshan. In the formal survey, a total of 280 questionnaires were distributed, 261 were returned, and the rate of return was as high as 93%. Excluding invalid questionnaires, the number of valid questionnaires was 216, and the effective rate was 77%. According to the survey, the proportion of men and women is basically the same, the proportion of male employees is 50.6%, and the proportion of female employees is 49.4%. The age is mainly concentrated between 20-30, which is in line with the characteristics of young Internet companies. Judging from the level of education, undergraduates account for 57.1%, master's degree or above is 24.7%, indicating that this study has a higher level of academic qualifications, and it reflects that Internet companies have higher levels of employee culture from the side.

### 3.2 Measures

All scales utilized a 5-point Likert scale with response options ranging from 1= strongly disagree to 5= strongly agree.

#### 3.2.1 Work Orientation

We used an 18-item scale from Wrzesniewski et al. (1997) that captures three dimensions of work orientation (job orientation, career orientation, and calling orientation)[23]. Sample items include: job orientation, "I am very conscious of what day of the work week it is and I greatly anticipate weekends."; Career orientation, "I view my job primarily as a stepping stone to other jobs."; Calling orientation, "I find my work rewarding." Cronbach's alpha for each dimension was acceptable: job ( $\alpha = .768$ ), career ( $\alpha = .827$ ), and calling ( $\alpha = .758$ ).

#### 3.2.2 Engagement

We used an 8-item scale from May (2004) that captures two dimensions of engagement which are the work engagement with 3 items and the organization engagement with 5 items[24]. Cronbach's alpha for scale was .859.

#### 3.2.3 Competitive Work Environment

We used a 20-item scale from Fletcher and Nusbaum (2010) that captures five dimensions of competition work environment. Examples of scale items include: tangible rewards, "I receive higher pay when I perform better than my coworkers."; nontangible rewards, "The best performers are offered additional working opportunities that are not available to all employees (e.g., assignments, responsibilities, scheduling)."; Recognition, "My coworkers and I are acknowledged for our accomplishments only when we outperform each other."; Status, "My standing is based on my performance relative to others."; Coworker, "My coworkers work hard to outperform each other." Cronbach's alpha for scale was .895.

#### 3.2.4 Employee Creativity

We used a 4-item scale from Farmer et al. (2003) to measure the employee creativity[25]. Examples of scale items include: "this employee tries new ideas or methods first" and "this employee generates ground-breaking ideas related to the field." Cronbach's alpha for scale was .922.

## 4 Results

Using AMOS, we performed a confirmatory factor analysis (CFA) to ensure that all items generated significant loadings on their construct of interest, that the constructs demonstrated adequate convergent and discriminant validity, and that the model generated good fit. The three work orientations were modeled as first-order latent variables, and each was represented by six items. Engagement and competitive work environment were both modeled as second-order latent factors. The two dimensions of engagement and five dimensions of competitive work environment were treated as first-order latent factors. These factors were then modeled as indicators of the higher-order construct.

**Table 1. Means, standard deviations, and correlations for all measures (N=216) .**

Means	M	SD	1	2	3	4	5	6	7	8	9	10
1.Gender	3.99	.82	1									
2.Income	1.51	.70	.497**	1								
3.Tenure	2.48	1.59	.092	.390**	1							
4. Job orientation	3.48	.77	-.094	.177*	-.019	1	<b>.768</b>					
5. Career orientation	3.51	.85	.124	.199*	.081	.364**	1	<b>.827</b>				
6. Calling orientation	4.36	.71	.015	.087	.031	.315**	.361**	1	<b>.758</b>			
7.Engagement	3.84	1.04	.015	.091	.103	.241**	.429**	.501*	1	<b>.859</b>		
8. Employee creativity	3.76	2.10	.043	.011	-.374	.176*	.361**	.384**	.356**	1	<b>.922</b>	
9.CWE	3.80	.89	.034	.237**	.167*	.197**	.401**	.289**	.382**	.288**	1	<b>.895</b>

Notes: \*\*P<0.01, \*P<0.05; N=216; CWE for competitive work environment. Alphas are displayed in parentheses on the diagonal.

The results showed that the baseline model with the six factors (job orientation, career orientation, calling orientation, engagement, competitive work environment, and employee creativity) had a good fit ( $\chi^2= 495.16$ ;  $df = 65$ ;  $RMSEA = .049$ ;  $CFI = .86$ ;  $NFI = .86$ ). In addition, four-factors models (combine job orientation, career orientation and calling orientation,  $\chi^2= 573.17$ ;  $df=69$ ;  $RMSEA = 0.109$ ;  $CFI = 0.84$ ;  $NFI = 0.82$ ), three-factors models (combine work orientation and competitive work environment,  $\chi^2= 873.17$ ;  $df=71$ ;  $RMSEA = 0.126$ ;  $CFI = 0.74$ ;  $NFI = 0.69$ ), two-factors models (combine work orientation, competitive work environment and engagement,  $\chi^2= 874.47$ ;  $df=72$ ;  $RMSEA = 0.109$ ;  $CFI = 0.67$ ;  $NFI = 0.52$ ) and one-factor models (combine all of six factors,  $\chi^2= 2087.87$ ;  $df=78$ ;  $RMSEA = 0.238$ ;  $CFI = 0.34$ ;  $NFI = 0.12$ ) had worse fits than our baseline model, indicating that the six factors were distinct constructs. A summary of the descriptive statistics and correlations among all variables was presented in Table 1.

Table 1 reports the means, standard deviations, and correlations for each of the variables in this study. Scale reliability (alphas) are displayed along the main diagonal. In the study of variable, the results show that job orientation ( $r=.176$ ;  $p<0.05$ ), career orientation ( $r=.361$ ;  $p<0.01$ ), calling orientation ( $r=0.384$ ;  $p<0.01$ ), engagement ( $r=0.356$ ;  $p<0.01$ ) and competitive work environment ( $r=0.288$ ;  $p<0.01$ ) was positively correlated with employee creativity, job orientation ( $r=.241$ ;  $p<0.01$ ), career orientation ( $r=.3429$ ;  $p<0.01$ ), calling orientation ( $r=0.501$ ;  $p<0.01$ ) was positively correlated with engagement, these provide initial support for the hypothesis of the study. For further examine the relationship between these variables, this study will use regression analysis.

### *Hypotheses testing*

We used hierarchical regression analysis to test our hypothesized relationships. It can be seen from the model 6, model 8 and model 10 in Table 2: Job orientation, career orientation and calling orientation

on employee creativity were all positive ( $\beta_s=.479, .499, .523$ , respectively,  $P_s<0.01$ ), which supported H1a, H1b, and H1c. From the model 2, model 3 and model 4 can be seen: job orientation ( $\beta=.239$ ,  $P<0.01$ ), career orientation ( $\beta=.334$ ,  $P<0.01$ ) and calling orientation ( $\beta=.463$ ,  $P<0.01$ ) had a significant positive impact on engagement, so it can be inferred that the work orientation has a positive impact on employee creativity by positively affecting their dedication. H2a, H2b, H2c are supported. Finally, through the analysis, we can find that although the regression coefficients are significant, the coefficient of the three pairs of models becomes significantly smaller after joining the engagement. Therefore, the engagement plays a partial mediation between the work orientation and the employee creativity. Hypothesis 3 is partially supported.

**Table 2. Comparisons of structural models.**

Variables	Engagement				Employee Creativity						
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11
Gender	-.104	-.071	.008	.009	-.010	-.074	-.006	-.074	-.006	-.073	-.016
Education	.167	-.201	.304	.014	-.154	.061	.314**	.121	.314**	.062	.324**
Age	.024	.127	.284	.285**	.047	.051	.091	.045	.031	.051	.104
Tenure	.150	.094	.345**	.142	.137	-.047	.002	-.047	.016	-.048	.017
Job orientation		.239**				.479**	.417**				
Career orientation			.334**					.499**	.445**		
Calling orientation				.463**						.532**	.497**
Engagement							.262**		.272**		.263**
R <sup>2</sup>	.157	.439	.593	.597	.460	.040	.127	.051	.111	.120	.122
$\Delta R^2$	.160	.531	.571	.534	.421	.641	.342	.644	.372	.371	.344
F	9.539**	17.402**	18.214**	18.634**	8.410*	14.521**	18.418**	19.964*	27.914*	21.969*	28.021**

Note: \*  $p<0.05$ , \*\*  $p<0.01$

For testing the interaction hypotheses, we created cross-product terms for each possible interaction between the three work orientation variables (i.e., job, career, calling) and CWE, resulting in a total of three interaction terms. Table 3 presents the results of the regression analysis. In Model 1: Employee creativity, three dimensions of work orientation and competitive work environment were included in the model. Results show that job orientation, career orientation, calling orientation, and competitive work environment have a positive effect on employee creativity. In Model 2: The three interaction terms (job\*competitive work environment, career\* competitive work environment, and calling\* competitive work environment) were put in the model. The interaction coefficients were significant, Hypotheses 4a,4b and 4c were supported, the  $\beta_s= -.153, .157$ , and  $.210$ , and the  $P <0.01$ . That is, highly competitive work environments strengthen the positive relationship between the career orientations and employee creativity and between the calling orientations and employee creativity. While, highly competitive work environments strengthen the negative relationship between the career orientations and employee creativity.



**Table 3. Competitive work environment regression analysis.**

	Variables	Employee Creativity	
		M1	M2
Controls	Age	.200*	.241
	Gender	-.154	-.132
	Tenure	.000	.000
Variables	Job orientation	.479**	.199**
	Career orientation	.364**	.286**
	Calling orientation	.499**	.413**
	Competitive Work Environment	.532**	.186**
	Job* Competitive Work Environment		-.153**
Interaction Terms	career* Competitive Work Environment		.157**
	calling* Competitive Work Environment		.210**
	R <sup>2</sup>	.094	.210
	△R <sup>2</sup>	.063	.106
	VIF maximum	6.541**	6.072**

Note: \* p<0.05 , \*\* p<0.

## 5 Discussion and Future research

### 5.1 Theoretical and Practical Implications

In this study, we use AMOS and SPSS to verify the impact of work orientation on engagement, the influence of engagement on employee creativity, and the mediating role of engagement and the moderating role of competitive work environment. Among the eight hypotheses in this study, engagement plays a part mediating role in work orientation and employee creativity. The theoretical significance of this study is to further enrich the theory of creativity and work orientation, and to explore the new competitive work environment theory. Therefore, this paper has certain theoretical and practical implications.

The theoretical significance of this study is as follows: First, the study demonstrates the relationship between work orientation and employee creativity. The empirical results show that the three dimensions of work orientation (job, career and calling) have significant positive relationship to employee creativity, and the employees with calling orientation have stronger intrinsic motivation. Therefore, the positive influence of calling orientation on engagement is more significant than the other two kinds of work orientation. The positive relationship between engagement and employee creativity also shows that the higher engagement, the more time and energy are invested and the positive emotion is involved. Thinking is more active and the creativity is more prominent. Empirical results also proved that the three dimensions of work orientation have a significant positive impact on employee creativity through engagement. Second, our research reveals that the competitive working environment moderates the relationship between work orientation and employee creativity. The competitive work environment is a relatively new concept. There are few literatures on the psychological state of employees in competitive work in China, and few of them are included in management research. This paper shows that the competitive work environment is closely related to the work orientation and employee creativity. The empirical results show that the influence of different work orientation on the creativity of employees is different. Employees with job orientation will adopt avoidance behavior in high competitive work environment, while those with career orientation and calling orientation can better stimulate their engagement and thus improve their creativity.

The practical significance of this study is as follows: With the progress of science and technology,

innovation has become the first driving force for development. The level of employee creativity is directly related to the sustainable and healthy development of the organization. Based on the theory of intrinsic motivation and learned effort, this paper tries to give some suggestions to the managers of enterprises. In the recruitment process, select the career/calling-oriented candidates that attaches importance to the meaning of the job. In the incentive process, it is necessary to appropriately increase or reduce the competitive work environment for different companies and departments. Measures can be taken from the five dimensions of the competitive working environment to improve according to different situations to achieve a healthy balance of enterprise development; In terms of performance compensation, differentiated incentives can be implemented for employees with different work orientations.

## 5.2 Study Limitations and Recommendations for Future Research

This research focuses on Internet employees, constructed a theoretical model of work orientation, engagement, competitive work environment and employee creativity, and through empirical research, this paper explores the mechanism of work value orientation on employee creativity. However, there are still some shortcomings in this paper. First, due to the limitation of manpower, material resources, financial resources and time, all the data in this paper are collected at the same time. The causal relationship between work orientation and employee creativity needs further verification. As a result, future research can expand the sample size, lengthen the time, and through collect longitudinal data to verify the impact of work orientation on employee creativity. Second, the competitive work environment is also divided into five dimensions, including tangible rewards, intangible rewards, recognition, status, and competitive coworkers. Factors that affect employees more significantly may be one or any of the five dimensions of a competitive work environment. In the future, we can further explore the specific work orientation under the adjustment of five dimensions.

## References

- [1] Amabile T. M. Creativity In Context [J]. *Nature*, 1996, 283(5750):877.
- [2] Shalley C. E., Zhou J, Oldham G R. The Effects of Personal and Contextual Characteristics on Creativity: Where Should We Go from Here? [J]. *Journal of Management*, 2004, 30(6):933-958.
- [3] Song Zhigang, Gu Qinxuan. Creative Personality and employee creativity: a regulated intermediary Model [J]. *Psychological Science*: 2015 38 03: 700-707.
- [4] Li Yang, Bai Xinwen. Kind-hearted lighting up creativity: the influence of internal motivation and prosocial motivation on creativity [J].*Progress in Psychological Science*: 175-181.
- [5] Oldham G. R., Cummings A. Employee Creativity: Personal and Contextual Factors at Work [J]. *Academy of Management Journal*, 1996, 39(3):607-634.
- [6] Zhou J. When the Presence of Creative Coworkers Is Related to Creativity [J]. *Journal of Applied Psychology*, 2003, 88.
- [7] Dewett T. Linking intrinsic motivation, risk taking, and employee creativity in an R&D environment [J]. *R&D Management*, 2007, 37(3):197–208.
- [8] Shalley C E, Perrysmith J E. Effects of social-psychological factors on creative performance: The role of informational and controlling expected evaluation and modeling experience.[J]. *Organ Behav Hum Decis Process*, 2001, 84(1):1-22.
- [9] Tian Xizhou, Zhangyu, Dong Qiang. A study on the value orientation of Laborer's work and its influence in Chinese context [J]. *Soft science* 30/01: 91-94.
- [10] Feng Xiaotian. The significance of the work of identity and change of social science [J]. *two generations*, 2011 (03): 83-90.

- [11] Serow R. C. Called to teach: A study of highly motivated preservice teachers [J]. *Journal of Research & Development in Education*, 1994, 27(2):65-72.
- [12] Hou Xuanfang, Li Yanping, Tu Yidong. New generation of job values structure, measurement and impact on performance[J]. *Psychology report* 2014, 46(06): 823-840.
- [13] Zhang Yong, long Lirong. The impact of performance pay on employee creativity: the role of Human-Job matching and Creative Self-efficacy [J]. *Psychology report* 2013/45/03: 363-376.
- [14] Zhang Yong. Long Li Rong. Shi Wei . The impact of performance compensation on employee breakthrough creativity and progressive creativity. *Journal of Psychology*, 2014, 46 (12): 880–1896.
- [15] Zhang Yong, Liu Haiquan, Wang Mingxuan, Qing Ping. The effects of challenging stress and blocking stress on employee creativity: the intermediary effect of self-efficacy and the regulatory effect of organizational equity [J]. *Psychology report* 2018 04: 1-12.
- [16] Zhao Hongdan, Jiang Wei. The curvilinear relationship between Civil Behavioral stress and employee creativity in the Workplace the situational Mechanism of Self-efficacy [J]. *Financial and economic theory*: 2018 / 02: 95-103
- [17] Tang Peipei. Research on the interaction effect of team Innovation atmosphere and work orientation on Innovation behavior [D]. Tianjin University of Technology.
- [18] Brown S. P., Cron W. L., Slocum J W. Effects of Trait Competitiveness and Perceived Intraorganizational Competition on Salesperson Goal Setting and Performance [J]. *Journal of Marketing*, 1998, 62(4):88-98.
- [19] Edwards J. R., Cable D. M. The value of value congruence [J]. *Journal of Applied Psychology*, 2009, 94(3):654
- [20] Fletcher, Thomas D., Nusbaum, David N. Development of the Competitive Work Environment Scale: A Multidimensional Climate Construct [J]. *Educational & Psychological Measurement*, 2009, 70(1):105-124
- [21] Schaufeli W B, Bakker A B. Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. [J]. *Journal of Organizational Behavior*, 2004, 25(3):293–315
- [22] Jones J. L., Davis W. D., Thomas C H. Is Competition Engaging? Examining the Interactive Effects of Goal Orientation and Competitive Work Environment on Engagement [J]. *Human Resource Management*, 2015, 56(3):389-405
- [23] Amy Wrzesniewski, Clark McCauley, Paul Rozin. Jobs, Careers, and Callings: People's Relations to Their Work [J]. *Journal of Research in Personality*, 1997, 31(1):21-33.
- [24] Farmer, S., Tiemey, P., & Kung-Mcintyre, K. (2003). Employee creativity in Taiwan: An application of role identity theory. *The Academy of Management Journal*, 46(5), 618–630
- [25] May D. R., Gilson R. L., Harter L. M. The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. [J]. *Journal of Occupational & Organizational Psychology*, 2004, 77(1):11-37.