

## Research Article

# The Mediating Role of Work Engagement in the Psychological Contract and Work Performance of Employees in Zhejiang E-Commerce Enterprises

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**Abstract:** In order to investigate the mechanism of psychological contract on work performance of employees in e-commerce enterprises, the theoretical model of psychological contract, work dedication and work performance is constructed based on social exchange theory and self-determination theory. By empirically analysing the questionnaires collected from 408 employees of e-commerce enterprises in Hangzhou, Wenzhou and Yiwu, Zhejiang Province, using Smart PLS 4 software, it was found that the psychological contract has a significant positive impact on the work performance of e-commerce enterprises' employees, and the degree of work engagement plays a partially intermediary role between the psychological contract and work performance. E-commerce enterprises need to improve employees' satisfaction with the fulfilment of the psychological contract, so as to ultimately improve employee engagement and achieve the ultimate goal of improving employee work performance.

**Keywords:** psychological contract, work performance, work engagement, e-commerce enterprises

## 1. Introduction

China has been in a period of economic and social development transition, the economic mode, social structure change and its triggered by the concept of change, is profoundly changing the e-commerce enterprise employee relations, but also affects the employee's work commitment and performance. This transformation has been driven by structural economic changes, the shift from a controlled economy to a socialist market economy, and significant reforms in various sectors (Chen et al., 2020; Wong et al., 2004). On the one hand, employees' values have changed drastically, and their interests are becoming more and more diversified, particularly the younger workforce, defined as those born between 1980 and 1990, who have steadily taken the lead in e-commerce enterprises, and who are pursuing self-career development and a good environment for their growth, and have shown more subjective attitude towards work. They exhibit greater subjectivity, autonomy, and creativity in their work, focus more on spiritual and achievement rewards, and have rising expectations for the enterprise (Chen et al., 2020). However, in order to remain competitive in the market, the company is putting more emphasis on improving quality and efficiency. As a result, there is a growing sense of urgency to raise the standard of service and improve quality, which raises the demands on the staff (Wong et al., 2004). As a result, employees in the

e-commerce industry face greater work pressure, greater work insecurity, less choice and control, and a lack of clear role positioning (Chen et al., 2020). The trust between e-commerce enterprises and their employees is steadily eroding due to a growing cognitive bias towards each other's rights and obligations. This, in turn, is causing an increasing amount of unhappiness and even aggressive behaviors. Lack of staff vitality, reduced work engagement, and declining performance are seriously troubling the management of e-commerce enterprises (Wong et al., 2004). The most fundamental requirement for successfully inspiring people and fostering their involvement is getting to know them, enabling them to perceive their own contributions and benefits more fairly and equally. The goal of psychological contract, a cognitive and belief system of duty and obligation, is to provide a dynamic and methodical framework for thinking that will increase employee engagement by offering a fresh understanding of the attitudes, behaviors, and expectations of workers in e-commerce enterprises (Chen et al., 2020).

According to the self-determination hypothesis, people might be more autonomously motivated at work when their core psychological needs—such as relationships, competence, and autonomy—are met (Ryan & Deci, 2017). The Job Demands-Resources Model goes on to state that e-commerce enterprises can improve employee work engagement by offering staff members access to essential resources like salary rewards, professional training, social support, and development possibilities (Bakker & Demerouti, 2017). Based on this, the potential relationship between employees' psychological contracts and their work engagement in e-commerce enterprises as well as the positive correlation between work engagement and work performance, the current study aims to determine whether psychological contracts influence work engagement, which in turn influences work performance (Bakker et al., 2014).

## 2. Research hypotheses

### 2.1 *Psychological contract and work performance*

The psychological contract was initially presented to the discipline of management by Argyris and is used to describe a relationship of psychological expectations between subordinates and supervisors in an organization (Rousseau, 1995). In essence, the psychological contract is how one perceives and believes they have obligations (Rousseau, 1995). There are two ways in which the psychological contract can be understood: broadly and narrowly, depending on how the cognitive subject is understood. The broad understanding is that the psychological contract is a bilateral relationship between the enterprise and the employees, while the narrow understanding only emphasizes the unilateral relationship between the employees (Rousseau & Tijoriwala, 1998). This essay utilizes the argument that the psychological contract is a cognitive and belief system of reciprocal duties and obligations that is established between an organization's employees and the organization itself based on the employees' employment relationship with the organization as well as commitments and perceptions of both parties (Rousseau, 1995). Since the psychological contract is a contractual relationship, it requires the interaction of both the organization and the employee in order to be formed, and this bilateral relationship will also produce dynamic interactions, which in turn affect the adjustment, development, and change of the content of the psychological contract (Hui, Lee, & Rousseau, 2004).

Task performance and contextual performance are the two aspects into which Borman and Motowidlo (1994) separated work performance. Task performance is directly related to work, referring to the completion of work, emphasizing the ability of employees to complete their work, their attitude towards work, and measuring their proficiency, personal ability, and knowledge reserves. The level of task performance determines the level of work efficiency (Van Scotter & Motowidlo, 1994). Contextual performance, nonetheless, demonstrates behavior that make better organizational effectiveness instead of possessing any immediate impact on the primary responsibilities of the position in question, such as taking on additional tasks and maintaining harmonious interpersonal relationships (Borman et al., 1997).

Katou through a study of British firms, showed that employees' psychological contract for the profitability, development, and supportive atmosphere of the organization had a strong correlation with work performance (Katou, 2015). Waskito et al. (2023), through investigation showed a positive relationship between relational contract and job satisfaction and job performance (Waskito, J., & Linansya, W., 2023). Accordingly, in this study, the following hypotheses are put forth:

H1: The psychological contract has a significantly and positively influence work performance.

## 2.2 Psychological contract and work engagement

Work engagement has become more prominent due to the growth of positive psychology and positive organizational behavior studies. Positive and comprehensive emotional and cognitive states connected to work are known as work engagement (Barragan-Jason et al., 2023). Schaufeli posits that employee engagement and job burnout are opposing states, where a high degree of enjoyment and activation characterize participation. He continues on to explain that, in its three dimensions—vigor, dedication, and absorption—engagement is a psychological state of actively accomplishing work that is characterized by long-lasting, substantial, and profoundly cognitive-emotional experiences (Schaufeli, 2017).

The psychological contract is the subjective perception of employees and organizations regarding their mutual rights and obligations. Dedication, as part of this contract, reflects employees' willingness to invest in their work and organization based on their perceived rights and obligations (Lim, 2023). Therefore, motivating employees to participate in work, integrate into the organization, and share the development vision is a shared objective between the psychological contract and employee work engagement. According to social exchange theory, employee engagement involves reciprocal behaviors between the organization and its members. Employees reciprocate higher levels of engagement when they perceive the psychological contract as fulfilled; conversely, when they perceive it as violated, they may withdraw from their work roles or consider leaving the organization. If employees receive resource support from the organization, they feel more obligated to perform well in return (Bakker & Demerouti, 2007). Therefore, the hypothesis is formulated:

H2: There is a significant positive correlation between psychological contract and work engagement.

## 2.3 Work engagement and work performance

Work performance is favorably correlated with employee engagement, making it one of the most crucial factors that positively impacts work performance. Research on knowledge workers has found a positive association between involvement and productivity (Barragan-Jason et al., 2023). It has been pointed out that engagement as a positive experience of employees at work will drive their performance (Bakker & Demerouti, 2007). Task and relationship performance are the main indicators used to assess an employee's work performance. Several studies have demonstrated that work motivation accounts for a significant amount of the variation in work performance (Aldabbas et al., 2023). In actuality, work engagement is a motivator that draws in individuals in finishing their work.

Employees that exhibit high levels of work engagement typically possess greater vitality and positive emotions. They also display a range of behaviors to meet performance standards in their roles, including cognitive, emotional, and physical (Bakker et al., 2014). Research indicates that workers who fully commit to their work roles in terms of their physical, cognitive, and emotional well-being are better able to focus on their duties, feel more emotionally invested in their role relationships, and put in more effort and time to complete their role tasks. All of these factors are positively correlated with high work performance (Abdelwahed, et al., 2023). Additionally, workers who are highly engaged at work exhibit organizational citizenship behaviors frequently because they have a strong psychological bond with their jobs and the corporation, as well as a profound comprehension of the purpose of their work and its goals (Schaufeli, 2017).

Similarly, Crant argues that employees with high work engagement are passionate and engaged in their work, furthermore, this promotes positive behaviors that include supporting and helping colleagues while offering the organization insightful recommendations (Wang et al., 2024). Based on the above analysis, hypothesis H3 is proposed.

H3: There is a significant positive relationship between work engagement and work performance.

## 2.4 The mediating role of work engagement

Employee performance is greatly improved by work engagement, according to a number of empirical research. There are four ways in which work involvement fosters work performance. First, individuals who are really involved in their profession feel more pleasant emotions, which enhances their cognitive abilities and increases the resources at their service (Wang et al., 2024). Second, as a positive work state, work engagement enhances an individual's physical and mental health, which helps employees focus their resources on their work (Bakker et al., 2014). Third, work engagement stimulates employees' enthusiasm for work, encourages them to actively solve work problems, enrich their work content, optimize

their work methods, and expand the scope of interpersonal interactions, which further creates more work resources and opportunities for themselves (Wang , 2024). Fourth, work engagement also has a transmission effect, infecting colleagues around them, thus improving the work atmosphere and enhancing work effectiveness together (Hanaysha 2016).

Thus, this paper expects that work engagement is a mediating mechanism for the psychological contract to influence work performance, and proposes the hypothesis:

H4: The psychological contract affects work performance through the mediating effect of work engagement.

### 3. Methodology

The survey period of this study was from March to April 2023, and the questionnaires were distributed to the employees of e-commerce companies in Wenzhou, Yiwu and Hangzhou, Zhejiang Province, using both online email and paper questionnaires for random sampling. The study followed Brislin’s(1980) suggested procedure of converting the English questionnaire into Chinese by the traditional ‘translate-back’ method. Two professors from the field of management were asked to assist in identifying the discrepancies in the translations and resolving the issue of ambiguities in order to prevent ambiguities and allow Chinese respondents to accurately grasp the questionnaire before selecting the answers they provided. For each variables in the study, a 5-point Likert scale was employed (1 representing ”strongly disagree,” to 5 representing ”strongly agree”). Out of the 600 surveys that were distributed, 437 were eventually returned, excluding 29 questionnaires such as omissions, the final number of valid questionnaires was 408 for analysis, and the results of the descriptive statistical analysis of the sample are shown in Table 1.

**Table 1.** Description statistic ( $N = 408$ ).

Items	Category	Frequency	Percent
Gender	Male	234	57.4
	Female	174	42.6
Age	Under 19	56	13.7
	19–29 years old	125	30.6
	30–39 years old	115	28.2
	40–49 years old	61	15
	50–59 years old	46	11.3
	Above 60	5	1.2
The highest of Education level	Foundation	79	19.4
	Diploma	136	33.3
	Undergraduate	156	38.2
	Master/PhD	37	9.1
Marital status	Single (never married)	157	38.5
	Married	240	58.8
	Divorced/Separated	7	1.7
	Others	4	1
Worked years	Less than 1 year	113	27.7
	1–2 years	135	33.1
	2–4 years	127	31.1
	More than 4 years	33	8.1
Total		408	100

Work Performance (JB). This study used Welbourne & Amir's (1998) scale of work performance for measurement. The scale was measured in five dimensions of job, career, innovator, team and organization with a total of 20 questions, with questions such as 'I work an above-average number of hours' .

Psychological Contract (PC). This study was conducted by drawing on Matthijs Bal & Kooij's (2011) Psychological Contract Scale, which consists of 13 questions, including transactional contract (7 questions) and relational contract (6 questions). The question items were such as 'My commitment to this organization is defined by my contract' .

Work Engagement (WE). This paper uses Kahn & Kahn's (1990) Work Engagement Scale. The scale measures employee engagement in three dimensions: cognitive engagement, affective engagement, and behavioural engagement, with 14 questions and items something like, 'I think my work helps the organization achieve its goals.'

## 4. Results

### 4.1 Measurement model

This study was conducted using Smart PLS 4 software, starting with the assessment of the measurement model, which needs to be assessed by calculating the reliability (Cronbach's  $\alpha$ ), convergent validity and discriminant validity (Hair et al.,2020). Table 1 shows that all of the constructs' reliability indicators exceed the minimum criteria of  $>0.70$  for the Cronbach's  $\alpha$  value, which is used to quantify the internal consistency of the variables. Furthermore, all of the construct question items' factor loadings had to be greater than 0.40, and as Table 1's results show, all of them perform, validating the study's reliability. The correlation between a construct and its alternative constructs is known as convergent validity, and it is determined by two criteria: average variance of extraction (AVE) and compositional reliability (CR). where the minimum allowable thresholds for Average Variance of Extraction (AVE) is 0.50 and above, and the minimum acceptable level for Compositional Reliability (CR) is 0.70. As a result, the current study's findings demonstrated that all CR and AVE values were at a satisfactory level (see Table 2).

Table 2. Measurement model.

Constructs	Item	Factor loading	Cronbach's alpha	CR	AVE
PC	TC	0.867	0.919	0.921	0.845
	RC	0.905			
WE	VI	0.787	0.928	0.929	0.826
	DE	0.823			
	AB	0.832			
JB	JB1	0.703	0.891	0.893	0.755
	JB2	0.649			
	JB3	0.745			
	JB4	0.747			
	JB5	0.679			

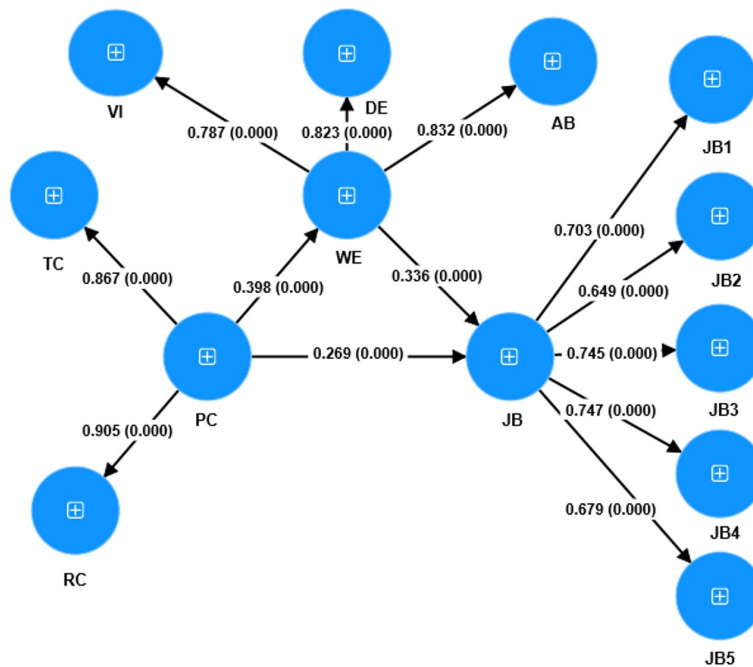
The square root of the mean variance of the extractions (AVE), which was used to assess discriminant validity, had to be greater than the correlation between all the components. Consequently, the study's findings demonstrated that the square root of the mean variance of the extracted (AVE) for each construct had a higher value, which was consistent with the lowest acceptable level, after comparing the AVE for each construct with all other constructs (cf. Table 3). Thus, the study's conclusions demonstrated that the measurement model provided results that were adequate for future research in terms of discriminant validity, convergent validity, and reliability.

**Table 3.** Discriminant Validity.

	JB	PC	WE
JB	0.57		
PC	0.411	0.714	
WE	0.463	0.408	0.682

### 4.2 Structural Model

In this study, the structural model (path) was tested using Smart PLS 4 software and the results of its operation are shown in the structural model in Figure 1. First, as Table 4 illustrates the direct effect research results, work performance is significantly improved by the psychological contract ( $\beta = 0.269$ ,  $p$ -value =  $0.000 < 0.001$ ), so hypothesis H1 is supported. Work engagement is significantly enhanced by psychological contract ( $\beta = 0.398$ ,  $p$ -value =  $0.000 < 0.001$ ), therefore hypothesis H2 is supported. Work engagement has a significant positive effect on work performance ( $\beta = 0.336$ ,  $p$ -value =  $0.000 < 0.001$ ), therefore hypothesis H3 is supported.



**Figure 1.** Structural model.

**Table 4.** Path analysis.

	$\beta$	SE	$t$ -values	$p$ -values
PC→WE	0.398	0.044	9.091	0
PC→JB	0.269	0.054	5.002	0
WE→JB	0.336	0.053	6.374	0

Between psychological contract and work performance, the mediating effect value of work engagement is 0.134 (Table 5), with a 95% confidence interval of [0.084, 0.195], which does not contain 0. Consequently, hypothesis H4 is validated.

**Table 5.** Mediation effects tests.

	$\beta$	SE	<i>t</i> -values	<i>p</i> -values	95%CI
PC→WE→JB	0.134	0.028	4.702	0	[0.084,0.195]

## 5. Conclusion and discussion

### 5.1 Conclusions of the study

Based on the cultural context of China and on self-determination theory and social exchange theory, this study explores the intrinsic mechanism of the psychological contract affecting employees' work performance with a sample of 408 e-commerce enterprise employees from Hangzhou, Wenzhou, and Yiwu, Zhejiang Province, China, by introducing work engagement as a mediating variable. The results found that: Psychological contract exerts a noteworthy positive influence on work engagement, which in turn has a noteworthy positive impact on employees' work performance. Additionally, work engagement plays a partially mediating role in the relationship between the psychological contract and employees' work performance.

### 5.2 Theoretical implications

First, it enhances the psychological contract's compound and research range. This study investigates the influence of psychological contract on employee work performance based on the Chinese cultural context, given the absence of research on the relationship between psychological contract and employee work performance in e-commerce in China and using Chinese e-commerce employees as a research sample, which helps to enrich and deepen the research field and content of psychological contract, and promotes the improvement and development of psychological contract theory.

Second, it unveils a brand-new work engagement mechanism that links the psychological contract to work performance. This paper advances the understanding of the mechanism of the interaction between the two by introducing the measurement of work engagement as a mediating variable and analyzing the relationship between work engagement and the psychological contract in terms of employees' proactive behaviors and intrinsic motivation. The analysis is based on a comprehensive review and summary of the literature.

### 5.3 Management implications

Based on the understanding of the psychological contract, e-commerce enterprises should provide employees with necessary salaries and benefits, and employees should be responsible for completing the work assigned by the enterprise. Through data analysis, it can be seen that the psychological contract is significantly positively correlated with the degree of employee engagement, therefore, through the implementation of diversified, flexible compensation and welfare system, and the establishment of the whole life cycle of the performance management system to improve the satisfaction of the employees on the fulfilment of the psychological contract, which will ultimately improve the degree of employee engagement. At the same time, e-commerce enterprises should provide employees with sufficient space for career development, necessary training and support, etc., in order to improve the sense of well-being, sense of achievement and satisfaction of employees, while employees should actively and proactively take responsibility beyond their duties while endeavouring to complete their work to contribute to the achievement of corporate goals, and they can also contribute to the achievement of corporate goals through the establishment of a comprehensive incentive system that combines material incentives and spiritual incentives, the introduction of humane and democratic management mechanisms, and the It can also be achieved by establishing a comprehensive incentive system combining material incentives and spiritual incentives, introducing humane



and democratic management mechanism, and creating a good organizational culture to improve employees' satisfaction with the fulfilment of the psychological contract, so as to ultimately improve the degree of employees' dedication and achieve the ultimate goal of enhancing employees' performance.

#### **5.4 Limitations and future directions**

There are some limitations in the research process of this paper, which should be improved in the subsequent research. First, the limitations of the research sample. The sample of this study mainly comes from some enterprises in Hangzhou, Wenzhou and Yiwu in Zhejiang Province. Considering that there are big differences in the political, cultural and economic development level of each region in China, future research should expand the sample scope and field, so as to make the results of the study more universal.

Second, the limitations of variable selection and measurement. The variables in this study were measured using internationally established and authoritative scales, but due to the large differences in the conceptual meaning, dimensions, and measurements of the variables between Chinese and Western societies, future research should develop variable measurement scales that are consistent with the Chinese cultural context.

### **Conflict of Interest**

The authors declare no conflict of interests.

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