

# Perception of Justice Mediates Relationship between Pay Dispersion and Job Involvement

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## Abstract

Injustice is a common phenomenon which has a negative impact on not only the employees' job involvement, but also their career success, and ultimately has an undesirable impact on the organization. Furthermore, managers and employees mostly are concerned about pay situation among many factors that cause the perception of unfairness. Nowadays, the majority of studies empirically verified how pay dispersion between subordinate relationship affects employees' behavior. Few scholars explained the relationship between perception of justice affected by pay dispersion and job involvement based on equity theory. Thus, this study helps enterprises to understand the employees' psychological perception of pay dispersion, so that managers can balance the internal salary gap and ameliorate the employees' justice perception, and motivate employees to involve into work.

## Keywords

Pay Dispersion, Perception of Justice, Job Involvement

## 1. Introduction

Recently, establishing a motivating salary system related to employees working motivation is one of the core competitive capabilities in organizations. Especially, scholars mainly pay attention to the level and dispersion of salary. Pay dispersion is defined as a difference in the amount of compensation among employees caused by salary structure, reflecting the difference in income among different individuals or groups [1].

Although numerous scholars studied about how pay dispersion affects employees and organizations, there is no consensus about the result caused by pay dispersion. After a deep research on related literature, it found that studies on consequences on employees and organizations of pay dispersion were based on

different theories which explain how pay dispersion affects individuals or groups. In the past few decades, the majority of studies focused on pay dispersion between supervisors and subordinates based on tournament theory which points out that the wage increase associated with a given promotion will affect the motivation of employees who are below the job level. In other words, as long as the employee does not fully understand the outcome of the promotion, they will be incentive to work harder to get promoted [2]. This study empirically verifies how pay dispersion affects individuals' job involvement mediated by perception of justice based on equity theory, which supports a statement that less competitive bonus and pay dispersion, justice salary distribution encourage more cooperation among employees, and promote organizational performance. Shortly, these scholars mainly focus on the impact of pay dispersion on employees' perception of fairness as well as behavior.

In the past few decades, job burnout has attracted the attention from scholars in organizational behavior, human resource management, and psychology disciplines, but in recent years, scholars are more concerned about employee behavior in some positive ways, such as job involvement. According to job demands-resources model, organizational fairness is a resource in company. When employees can't receive adequate perception of justice, they will reduce their job involvement at work [3].

## 2. Literature Review and Hypothesis

Pay dispersion is defined as a difference in the amount of compensation among employees caused by salary structure, reflecting the difference in income among different individuals or groups [1]. Recently, Shaw and Gupta (2007) pointed out that there are at least three different types of pay dispersion, horizontal pay dispersion (the gap between the same kind of works), and the vertical pay dispersion (gap between different jobs) and overall pay dispersion (the gap across multiple job categories within different jobs) [4]. Moreover, Downes and Choi (2014) divided the pay dispersion into a 2\*2 pay dispersion matrix based on performance-based salary or non-performance-based salary and vertical salary or horizontal salary [5]. Differently, this study is based on three reference point theory, examine pay dispersion as the perception of the employee's self-level relative pay dispersion between the employee's current salary status quo (SQ) and the reference points (minimum salary requirement in current position (MR) and the salary goal (G) [6].

Furthermore, scholars examined how different kinds of pay dispersion affect employees and organization by way of related mechanisms such as Tournament theory and Equity theory. Tournament theory refers that under the condition of team activities with cooperative production and task interdependence, when the homogeneous workers in the market are risk-neutral takers, with the difficulty increasing of supervision, the larger salary dispersion between the levels can reduce the supervision cost and induce efforts from agents (competitors) as well as

provide a strong incentive for principals and agents to achieve the optimal distribution of social resources. Therefore, increasing the salary dispersion can improve the performance of competitors and the companies.

On the other hand, this study verifies how pay dispersion affects employees' behavior from Equity theory, which states that the motivation of employees is not only related to the actual amount of payment they get, but also to employees' perception of fairness in the distribution of rewards. Employees always consciously or unconsciously compare their labor costs and rewards with others, and make judgments about whether they are treated fairly or not. The perception of Justice directly affects employees' work motivations and behaviors. However, based on three reference point theory, the process of employees comparing their salary with others reflects how individuals perceive the justice in company. After comparing their salary with others, individuals can perceive their minimum salary requirement in current position (MR) and the salary goal (G), so figure out how is current salary status quo (SQ) they are receiving. Besides, Laurie and Michae pointed out that salary situation affects the way employees perceive fairness [7]. Therefore, when the dispersion between minimum salary requirement in current position (MR) and current salary status quo (SQ) is large, employees discern they receive a satisfying reward compared to their own labor cost and others, and perceive that they are receiving a fair salary.

Hypothesis 1: pay dispersion between minimum salary requirement in current position (MR) and current salary status quo (SQ) is positively related to employees' perception of justice.

Researches related to justice perception is relatively thriving, Early Adams stated that when employees perceive unfair, they will change their input to maintain fairness [8]. Besides, Demerouti and other scholars (2001) proposed a job demand-resource model, pointed out that when employees think that work resources (organizational support, organizational justice) are insufficient to meet the needs at work, employees' labor input will be declining [9]. Moreover, scholar proved that organizational justice is positively related to work commitment [10].

Hypothesis 2: Perception of justice has positive impact on employees' job involvement.

According to Equity theory, when employees perceive injustice, they will reduce their labor input to maintain fairness. How pay dispersion affects employees behavior depends on how they perceive the current salary and relative and perceived pay dispersion. Equity theory as one of the explanation mechanisms of the pay dispersion, when employees perceive that the current salary dispersion is unfair, motivation at work will be declined to maintain a fair perception. Similarly, economic benefits is one of resources of motivation of employees' justice perception [11], When employees realize that current salary status quo (SQ) is fair compared to the minimum salary requirement in current position (MR) and the salary goal (G) that is pay dispersion, individuals will be more confident on achieving salary goal (G), more motivated as well as higher job involvement.

Hypothesis 3: pay dispersion between minimum salary requirement in current position (MR) and current salary status quo (SQ) is positively related to employees' job involvement.

Hypothesis 4: Perception of justice mediates the relationship between pay dispersion and job involvement.

Finally, we conclude a model below in **Figure 1**.

### **3. Data and Methodology**

#### **3.1. Data Collection**

The formal survey was from July to November 2018, electronic questionnaires were distributed in Guangzhou, Shenzhen, Foshan and Zhuhai in Guangdong Province. The questionnaires were mainly distributed by the Internet-tech communications, finance, banking, trade and institutions and other industries. During the survey, 524 questionnaires were sent, 502 valid questionnaires and 22 invalid questionnaires were collected, and the effective questionnaire rate is up to 95.8%.

#### **3.2. Measurement**

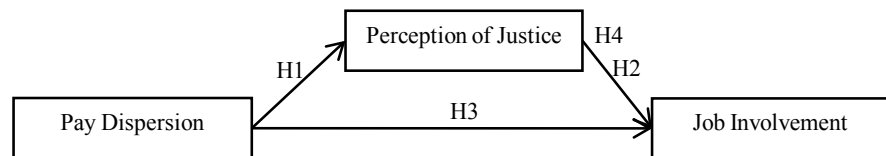
- For measuring pay dispersion, we cited reference point theory, examine pay dispersion as the perception of the employee's self-level relative pay dispersion between the employee's current salary status quo (SQ) and the reference points (minimum salary requirement in current position (MR) and the salary goal (G) [6].
- For measuring perception of justice, we used scale developed by Schminke, which is divided into 3 dimensions: Procedural justice, Distributive justice and Interactional justice, 16 items in total [10].
- For measuring job involvement, we used scale developed by Schaufeli, which is divided into 3 dimensions: Vitality, Dedication and Vigor. 17 items in total [12].
- We took Gender, Education, Marital Status, working years, industry, company's size and percentage of performance-based salary as control variables.

#### **3.3. Reliability Analysis**

After analyzing by SPSS 19.0, we found that the Cronbach's  $\alpha$  value of perception of justice is 0.953, CR is 0.573, Cronbach's  $\alpha$  value of job involvement is 0.971, CR is 0.772. Consider that Pay dispersion is a direct variable, it is unnecessary to analyse its' reliability.

#### **3.4. Validity Analysis**

The CFA was conducted to test construct validity among all variables. The original CFA or perception of justice was not satisfying, after deleting 2 items, it had a better fit ( $X^2/df = 4.424$ ,  $RMSEA = 0.084$ ,  $GFI = 0.904$ ,  $NFI = 0.933$ ,  $CFI = 0.947$ ,  $SRMR = 0.0388$ ). And job involvement had a good fit ( $X^2/df = 4.332$ ,  $RMSEA = 0.096$ ,  $GFI = 0.912$ ,  $NFI = 0.925$ ,  $CFI = 0.925$ ,  $SRMR = 0.0449$ ).



**Figure 1.** Study model.

### 3.5. Correlation Analysis

As is shown in **Table 1**, pay dispersion, perception of justice and job involvement are co-related to each other.

## 4. Result Analysis

Furthermore, as is shown in **Table 2**, the VIF value of the independent variable pay dispersion and perception of justice is 1.127, which is less than 2, indicating that there is no multi-collinearity between explanatory variables. In model 1, gender, education and Working Years are not significantly related to perception of justice. Marital Status, industry, company's size and performance-based salary have an impact on perception of justice. The R<sup>2</sup> and F values of model 1 are significant. In Model 2, the independent variable pay dispersion was put into regression analysis. The standardized regression coefficient of pay dispersion and perception of justice is  $\beta = -0.251$ ,  $p = 0.000$ , and the explanatory ability of Model 2 was 5.6% higher than that of Model 1 ( $\Delta R^2 = 0.056$ ), that is, the pay dispersion is negatively correlated with perception of justice, so H1 is supported.

As is shown in Model 4 **Table 3**, perception of justice has a significant and positive effect on job involvement ( $\beta = 0.588$ ,  $p < 0.001$ ), consistent with the prediction in H2. Besides, we found that from Model 5 pay dispersion has a significant and negative effect on job involvement ( $\beta = -0.208$ ,  $p < 0.001$ ), H3 is supported. In order to analyze the mediating effect of perception of justice to pay dispersion and job involvement, we added mediating variable into regression model, and we found that the coefficient of relationship between pay dispersion and job involvement changes from ( $\beta = -0.208$ ,  $p < 0.001$ ) to ( $\beta = -0.064$ ,  $p = 0.102 > 0.05$ ), which is not significant. In a word, H4 is supported. Perception of justice mediates the relationship between pay dispersion and job involvement.

## 5. Conclusions and Practical Implications

This study examines the relationship between pay dispersion and job involvement by verifying its mediating variable perception of justice which is one of the mechanisms of pay dispersion. Specifically, this study examines how pay dispersion negatively affects perception of justice, perception of justice has a positive influence on job involvement, as well as how perception of justice mediates the relationship between pay dispersion and job involvement so that explore one of the mechanisms of pay dispersion, equity theory.

In reality, managers can't just pay attention to the exact amount of pay dispersion level, but should consider the perceived pay dispersion of employees. They

**Table 1.** Means, standard deviations and correlations.

Variables	M	SD	Pay Dispersion	Perception of Justice	Job Involvement
Pay Dispersion	4.57	2.528	1		
Perception of Justice	3.42	0.655	-0.283**	1	
Job Involvement	3.50	0.859	-0.257**	0.606**	1

Note: \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001.

**Table 2.** Results of hierarchical regression analyses on pay dispersion and perception of Justice.

Variables	Perception of Justice	
	Model 1	Model 2
	$\beta$	$\beta$
Gender	-0.026	-0.003
Education	0.021	-0.015
Marital Status	0.155*	0.111
Working Years	-0.058	-0.030
Industry	-0.158**	-0.153**
Company's Size	-0.148*	-0.171***
Percentage of performance based salary	0.191***	0.150**
Pay dispersion		-0.251***
R <sup>2</sup>	0.074	0.129
$\Delta R^2$	-	0.055***

Note: \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001.

should communicate with employees mutually and investigate market salary level when making salary management. Besides, human resources department should provide employees for a considerable amount of compensation which is consistent with their input at work, as well as try to make the compensation decision process fair and transparent, and leaders should treat employees fairly to strengthen employees' perception of fairness, so as to enrich employees' job involvement at work, so that employees are motivated to work harder for a better performance for the company.

## 6. Limitation and Research for Future

Whereas, the scope of the study sample is limited. The samples in this study are mainly collected from employees in Guangdong. The samples are not sufficient to represent the characteristics of the overall Chinese employees, which will affect the stability of the theoretical model to some extent. Therefore, researches should expand the scope of the samples, so that it can improve the availability of this theory.

**Table 3.** Results of hierarchical regression analyses.

Variables	Job Involvement			
	Model 1	Model 2	Model 3	Model 4
	$\beta$	$\beta$	$\beta$	$\beta$
Gender	-0.009	0.862	0.010	0.012
Education	0.034	0.562	0.004	0.013
Marital Status	0.226***	0.001	0.189***	0.125*
Working Years	-0.162**	0.002	-0.139*	-0.122*
Industry	-0.029	0.094	-0.025	0.063
Company's Size	-0.033	0.192	-0.052	0.046
Percentage of Performance Based Salary	0.149**	0.337	0.115	0.029
Pay Dispersion			-0.208***	-0.064
Perception of Justice		0.588***		0.573***
R <sup>2</sup>	0.038	0.073	0.281	0.316
$\Delta R^2$	-	0.035***	0.208***	0.035***

Note: \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001.

Secondly, in terms of measurement, for measuring of the pay dispersion, this study uses a psychological perception method. Although it is more innovative, simple and applicable than directly measuring the absolute pay dispersion or the relative pay dispersion, it can be more scientific. Therefore, study in future can collect the specific salary information of ordinary employees to makes the research more quantitative and scientific.

Lastly, this study only uses the mediating role of perception of justice in pay dispersion and job involvement to explain the mechanism of pay dispersion, which is not scientific enough. In the future, in order to examine the mechanism of the pay dispersion, more manifest organizational performance variables can be used as the outcome variable to verify the mediating effect of perception of justice.

### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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