Job Characteristics and Relative Deprivation in Migrant Workers: The Mediating Role of Basic Psychological Needs

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[Abstract] Objective: The study aimed to investigate the relationship among job characteristics, basic psychological needs and relative deprivation in migrant workers. Methods: 358 migrant workers completed the Job Characteristics Scale, Basic Psychological Need Scale and Relative Deprivation Scale. Results: There were significant correlations among job characteristics, basic psychological needs and relative deprivation. Basic psychological needs served as a partial mediating role in the relationship between job characteristics and relative deprivation in migrant workers. Conclusion: Job characteristics in the migrant workers not only directly affect relative deprivation, but also support the indirect influence path through basic psychological needs.

[Key words] Job characteristics; Relative deprivation; Basic psychological needs

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工作特征与农民工相对剥夺感:基本心理需要的中介作用

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【摘要】 目的:考察农民工基本心理需要、工作特征与相对剥夺感之间的关系。方法:采用工作特征量表、基本心理需要量表和相对剥夺感量表对358名农民工进行调查。结果:农民工工作特征、基本心理需要与相对剥夺感之间相关显著,农民工基本心理需要在工作特征和相对剥夺感之间起部分中介作用。结论:农民工工作特征会影响相对剥夺感,也能通过基本心理需要间接影响相对剥夺感。

【关键词】 工作特征; 相对剥夺感; 基本心理需要

Relative deprivation is a subjective perception of negative emotions, which are produced by the comparison between the individual and the reference group^[1]. Since the American sociologist Stauffer put forward the concept of "relative deprivation" in 1949, it has become one of the important research topics in psychology, sociology, politics and economics^[2]. As the local governments in China began to open up public resources to migrant workers^[3], including education, public health, medical treatment and social security services, it evoked better longings of the migrant workers. However, the reality is that the migrant workers are still treated differently in employment, housing, health care, children's education and other aspects. They also suffer with relatively poor working conditions, overtime

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working hours, and arrears of wages, and feel the sense of relative deprivation^[4]. It is recognized that relative deprivation might not only bring negative effect on individual psychology^[5], but also cause depression and anxiety^[6]. It is one of the inducements for people to participate in mass incidents^[7,8]. Over the past few years, the emergence of migrant workers' labor disputes caused by such issues as payment, working conditions, occupational health and safety has triggered many labor mass incidents^[9,10].

Given that relative deprivation has a predictive effect on the negative behavior; it is of great practical significance to explore the mechanism of the relative deprivation of migrant workers. Over the years, researchers have argued that relative deprivation of migrant workers mainly came from two aspects. One is the difference between the migrant workers and local residents in terms of access to social security, salary, and education of children^[11, 12]. The other aspect is the gap

between the reality and expectation of migrant workers themselves. The convenience and beauty of cities arouse their longing for urban life, while the existence of a dual urban-rural social system makes this beautiful vision suppressed[13]. These studies have mainly mentioned the influence factors of the relative deprivation in migrant workers on the social front. Although the individual relative deprivation is constrained by the society, there should be a realistic economic basis for the migrant workers, which is limited by their human capital. Work is the tool for people to live on. The job characteristics performed by individuals could affect their inner emotional experience. At present, most migrant workers are engaged in less-demanding traditional manufacturing or construction industries. Their working conditions are relatively poor with low wages. However, their labor intensity is high while the occupational safety and health conditions cannot be guaranteed. Their efforts and returns can't reach the balance^[14]. Therefore, job characteristics might be the cause of the relative deprivation experience of migrant workers.

Although a negative relation between job characteristics and relative deprivation has been explained, relatively few studies have addressed the mediating mechanisms that account for this relationship. In order to understand how job characteristics might develop into relative deprivation, we propose to apply the perspective of the basic psychological needs theory. The concept of basic psychological needs can provide a theoretical support to better understand the etiology of relative deprivation. Job characteristics may affect the basic psychological needs of migrant workers, and then influence their sense of relative deprivation.

First of all, the dissatisfaction of basic psychological needs leads to the relative deprivation of migrant workers. In the 1980s, American psychologist Deci Edward L. and others summed up three basic psychological needs: autonomy, competence and relatedness^[15]. The satisfaction of these psychological basic needs would be conductive to maintaining a positive mental state and behaviors^[16], while their thwarting may reduce the individual's sense of accomplishment and happiness^[17]. In particular, the findings have shown that psychological basic needs satisfaction could improve the

efficiency of individuals, and reduce the relative deprivation of individuals^[18]. Secondly, job characteristics affect the basic psychological needs satisfaction of migrant workers. The modernization of industrialized production has been improved, while the people lost themselves in their work. They have become appendages to their work and cannot feel the significance of the work. Idaszak and Drasgow's considered that job characteristics affected the employee's job satisfaction, and then influenced the state of psychological needs[19]. Hackman reported that job characteristics had a positively impact on the basic psychological needs satisfaction and the behavior of employees, such as improved performance of creative work, organizational citizenship behaviors, positive job attitudes and subjective wellbeing^[20,21].

Taken together, job characteristics affect the basic psychological needs of migrant workers, which further influence their sense of relative deprivation. That is, the basic psychological needs may mediate the relationship between job characteristics and relative deprivation in migrant workers.

1 Participants and Methods

1.1 Participants

In the survey, 500 questionnaires were distributed, with 413 questionnaires were actually collected. Finally 358 questionnaires were valid. Of the participants, 163 were males and 195 were females. With regard to their level of education, 269 participants with below junior high school diploma, 82 participants with secondary vocational school or high school certificate, and 7 participants with college education. Their working years were classified into 3 groups, 129 people had worked for 5 years and below, 173 people had worked for 5 to 10 years, 56 with working years of 10 years and above.

1.2 Measures

1.2.1 Job Characteristics The scale consists of 15 items. It mainly includes five core dimensions(skill variety, task identity, task significance, job autonomy, and job feedback)^[22]. The participants rated the feelings of their job with each item on a scale from 1(strongly disagree) to 5(strongly agree). The score could explain

the positivity of job characteristics. The Cronbach's alpha reliability coefficient of the total scale was 0.865, and it was between 0.63 and 0.82 of the five core dimensions.

1.2.2 Basic Psychological Needs The scale consists

of 21 items^[15]. It mainly includes three dimensions(autonomy, competence and relatedness needs). The participants rated the feelings of basic psychological needs satisfaction with each item on a scale from 1 (strongly disagree) to 5(strongly agree). The Cronbach's α reliability coefficient of the scale was 0.811. 1.2.3 Relative Deprivation The scale consists of 6 items^[23]. On this scale, the participants reported the degree to which they agreed with each of the items from 1 (strongly disagree) to 5(strongly agree). The higher the score, the stronger the sense of relative deprivation individuals feels. The Cronbach's α reliability coefficient was 0.721.

1.3 Data Statistics

SPSS20.0, AMOS21.0 software were used to conduct the data analysis. Harman's single factor method was used to test the common bias of the data. Moreover the regression method and Bootstrap estimation procedure were used to analyze the mediating role of basic

psychological needs between job characteristics and relative deprivation.

2 Results

2.1 Common Method Bias Test

The study applied the Harman's single factor method proposed by Podsakoff et al. to test the common method bias^[24]. Exploratory factor analysis of all variables showed that the total of 8 common factors with initial eigenvalues greater than the first common factor, and it could explain 21.1% of the total variance, less than 40%. There was not significant common method bias in the measurement.

2.2 The Correlation Analysis of Variables

The descriptive statistics and correlations of variables were shown in Table 1. There were significant correlations among job characteristics, basic psychological needs and relative deprivation. Among them, each dimension of job characteristics was positively correlated with basic psychological needs satisfaction, but negatively correlated with relative deprivation. In addition, basic psychological needs satisfaction was significant negatively correlated with relative deprivation.

Table 1 Means, standard deviations, and correlations among variables(n=358)

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Variables	M	SD	Skill variety	Task identity	Task significance	Job autonomy	Job feedback	BPN
Skill variety	2.85	0.933	1					
Task identity	2.845	0.927	0.724**	1				
Task significance	2.722	0.799	0.636**	0.605**	1			
Job autonomy	2.773	0.682	0.439**	0.408**	0.625**	1		
Job feedback	2.759	0.821	0.637*	0.607**	0.655**	0.474**	1	
BPN	2.913	0.458	0.259**	0.202**	0.263**	0.233**	0.219**	1
RD	3.336	0.722	-0.379**	-0.314**	-0.417**	-0.374**	-0.381**	-0.216**

Note: BPN represents basic psychological needs, RD represents relative depravation, *P<0.05, **P<0.01

2.3 Meditational Analyses

In order to explore the mediating effects of basic psychological needs, we used hierarchical regression methods. And then bootstrapped confidence interval estimates of the indirect effect were calculated to confirm the significance of mediations^[25]. First, control the variables such as gender, education level and working years, and the independent variables(the five dimensions of job characteristics) were added into the model. Then the mediator(basic psychological needs) was added in the second step. In the final model, both the inde-

pendent variable and the mediator were added to assess whether the coefficient of the independent variable was significantly. The results were showed in Table 2. It revealed that each dimension of job characteristics was significant correlated with relative deprivation and basic psychological needs, and the variable basic psychological needs acted as a mediator had a significant effect on relative deprivation. It also indicated that basic psychological needs played a partial mediation between the each dimension of job characteristics and relative deprivation.

The mediating effect of basic psychological needs was examined by the Bootstrap estimation procedure. Results in Table 3 showed that basic psychological needs mediated the relationship between job characteristics and relative deprivation.

Table 2 Regression analysis of the mediating role of basic psychological needs

Variable	Dependent variable: relative depravation		Dependent variable: basic psychological needs			Dependent variable: relative depravation		
	β	t	β		t	β	t	
Gender	0.332	4.745**	-0.061		-1.291	0.32	4.59	96**
Educational level	-0.139	-1.945**	0.025		0.531	-0.134	-1.8	87
Working years	0.071	1.411	-0.023		-0.674	0.066	1.33	3
Skill variety	-0.254	-6.798**	0.144		5.741**	-0.225	-5.8	1**
BPN						-0.2	-2.5	37*
\mathbb{R}^2		0.192		0.096			0.206	
F value		20.932**		9.410	**		18.290***	
Gender	0.328	4.604**	-0.064		-1.338	0.312	4.42	24**
Educational level	-0.123	-1.697*	0.019		0.386	-0.119	-1.6	53
Working years	0.086	1.682*	-0.029		-0.836	0.079	1.50	6
Task identity	-0.222	-5.786**	0.104		4.022**	-0.196	-5.0	57**
BPN						-0.251	-3.2	25*
\mathbb{R}^2		0.165		0.055			0.189	
F value		17.447**		5.165	**		16.410***	
Gender	0.305	4.478**	-0.055		-1.168	0.296	4.35	53**
Educational level	-0.147	-2.116*	0.03		0.623	-0.142	-2.05	52*
Working years	0.089	1.823	-0.03		-0.876	0.084	1.72	24
Task significant	-0.356	-8.359**	0.16		5.417**	-0.328	-7.44	41**
BPN						-0.176	-2.31	11*
\mathbb{R}^2		0.237		0.088			0.248	
F value		27.401**		8.496	**		23.258**	
Gender	0.312	4.475**	-0.057		-1.192	0.3	4.33	35**
Educational level	-0.151	-2.136*	0.032		0.66	-0.145	-2.05	59*
Working years	0.091	1.816*	-0.031		-0.905	0.084	1.70)1*
Job autonomy	-0.372	-7.305**	0.173		4.974**	-0.336	-6.43	38**
BPN						-0.206	-2.67	75*
\mathbb{R}^2		0.206		0.077			0.222	
F value		22.885**		7.332	**		20.058**	
Gender	0.31	4.455**	-0.059		-1.232	0.297	4.30	05**
Educational level	-0.146	-2.067*	0.03		0.611	-0.14	-1.99	95*
Working years	0.076	1.517	-0.023		-0.68	0.071	1.42	29
Job feedback	-0.309	-7.326**	0.133		4.564**	-0.281	-6.52	24**
BPN						-0.215	-2.81	12*
\mathbb{R}^2		0.207		0.067			0.224	
F value		22.970**		6.341	**		20.326**	

Note: BPN represents basic psychological needs, RD represents relative depravation, *P<0.05, **P<0.01

Table 3 Mediating effect examined based on bootstrap estimation procedure

Independent variable	Mediate variable	Dependent variable	Direct effect	Indirect effect	Boot SE	95% confidence interval	
						lower limit	Upper limit
Skill variety	BPN	RD	-0.24	-0.034	0.015	-0.067	-0.009
Task identity			-0.214	-0.031	0.012	-0.06	-0.011
Task significant			-0.343	-0.034	0.015	-0.068	-0.008
Job autonomy			-0.354	-0.043	0.018	-0.083	-0.012
Job feedback			-0.301	-0.034	0.014	-0.065	-0.011

Note: BPN represents basic psychological needs, RD represents relative depravation

3 Discussions

The study indicated that positive job characteristics could increase the basic psychological needs satisfaction of migrant workers. It is recognized that the five dimensions of job characteristics might let people realize the meaning and responsibility of work, and stimulate the individual internal work motivation^[26]. Skills diversity and job autonomy could allow them to experience the meaning of work, to meet the psychological autonomy needs. Task integrity might enable the migrant workers to experience the responsibility of work. Task feedback could motive their inner motivation of working ^[27]. Positive job characteristics could also allow migrant workers to attain more work independence, experience more job responsibilities, and enjoy the sense of achievement, so that they felt the significance of work, and the sense of relative deprivation reduced.

The study also proved that job characteristics affected the relative deprivation experience through the mediating role of basic psychological needs. The empirical study indicated that basic psychological needs satisfaction could improve the experience of individual's subjective well- being^[28]. Therefore, organizations should design the jobs with positive features, such as expanding the work autonomy, cultivating migrant workers' diverse working skills, redesigning work units with complete meaning, emphasizing their importance on work, and giving timely feedback. In addition, the migrant workers should be allowed to gain the complete experience from the working process to the working result, and then have a positive emotional experience in their working environment, so as to reduce their relative deprivation.

Although the study discovered that job characteristics influence the relative deprivation through the meditating role of basic psychological needs, this might be only one of the possible mechanisms. It does not mean that the positive job characteristics will completely reduce the relative deprivation of individuals, while the negative job characteristics will expand the individuals' sense of relative deprivation. There may be other regulatory variables, such as the traditional Chinese culture "happiness consists in contentment". There-

fore, the attitude toward life and work may be a regulatory variable that influences the job characteristics and relative deprivation, which may be a topic to further research and analysis.

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