The Effect of Labor Contracts on the Psychological Contract Dynamics among Chinese Migrant Construction Workers

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ABSTRACT Well-developed employment relations should be clearly defined in psychological, economic and legal dimensions. The purpose of the present paper is to examine the effect of psychological contract fulfillment on the migrant workers’ job involvement and job performance, and how the interaction between psychological contracts and labor contracts dynamically influences migrant workers’ job involvement and job performance. Using a sample of 305 supervisor-subordinate dyads in 33 construction sites, the results showed that job involvement fully mediated the relationship between psychological contract fulfillment and job performance. Further, the labor contract status moderated the relationship between psychological contract fulfillment and job involvement, such that the positive relationship was stronger for migrant workers who did not sign a labor contract, compared with those who did. Theoretical and practical implications of these findings are discussed.

INTRODUCTION

Well-developed employment relations should be clearly defined in psychological, economic and legal dimensions (Marsden 2004). Although researchers have accumulated a large body of literature regarding the impact of psychological contracts in the workplace (Zagenczyk et al. 2014), empirical research exploring the joint effects of a labor contract and psychological contracts in shaping migrant workers’ work outcomes is lacking. From the psychological contract perspective, De Cuyper and De Witte (2006) or Guest et al. (2010) interpreted the significant difference of work outcomes among different contract type workers. However, far less is known about how the interaction between psychological contract and labor contract dynamically influences work outcomes, such as job involvement and job performance. Moreover, previous research has investigated how affective reaction mediates the effect of psychological contracts on job performance based on the affective events theory (Weiss and Cropanzano 1996; Wei and Si 2013). Then, from this perspective, is job involvement a mediator on the effect of psychological contracts on job performance?

This paper explored the above issues with migrant workers in the context of the People’s Republic of China. This is important given that informal employment became widespread among Chinese migrant workers (according to National Bureau of Statistics of China 2012, the rate of labor contract coverage was only 24.9 percent in the construction industry) and they had to rely on psychological contracts between two parties in the employment settings (Lee and Meng 2010; Kuruvilla et al. 2011). For example, most Chinese migrant workers find a job through Guanxi to lower environment uncertainty and they trust the contractors in their constructing team (Liu 2014; Wang et al. 2014), which indicates high quality social exchange, and in turn leads to perceptions of a psychological contract fulfillment (Swider 2015). From another perspective, although labor contracts can describe basic rights and obligations of both parties to provide a safeguard for harmonious employment relations (Li and Freeman 2014), it is less flexible and idiosyncratic compared with psychological contracts (Guest 2004). Flexibility and idiosyncrasy are very important in the construction industry because migrant workers’ pay is based on their unique experiences, and it is the experiences that largely determine the effectiveness of the construction process and the quality of the products (Lu and Fox 2001).
Literature Review

Psychological Contract Fulfillment and Job Performance

A psychological contract is generally understood as an unwritten, implicit contract or mutual expectation regarding the terms and conditions of the exchange relationship between employees and employers (Rousseau 1989). Psychological contract fulfillment takes place when one party in the relationship perceives that the other has met its promises (Rousseau 2009). The social exchange theory and equity theory have been used to explain the effects of psychological contract fulfillment on work outcomes (Adams 1965; Blau 1964). If the employer does something favorable towards the employees, the employees are obligated by social convention to return the favor such as devoting more effort to the job. Many studies have demonstrated that psychological contract fulfillment is positively associated with job performance. For example, Conway and Coyle-Shapiro (2012) confirmed the relationship between perception of psychological contract fulfillment and in-role job performance by a longitudinal design. Besides, Shih and Lin (2014) found a positive relationship between psychological contract fulfillment and extra-role job performance.

Psychological Contract Fulfillment, Job Involvement and Job Performance

Job involvement refers to the degree to which employees are cognitively preoccupied with, engaged in, and concerned with their present jobs (Zopiatis et al. 2014) and the degree to which an individual identifies psychologically with work (Lodahl and Kejner 1965). Following the Vroom (1964) expectation theory and Kanungo (1982) motivation model, individuals become more involved with activities when their jobs provided the opportunity to fulfill their psychological needs (Agarwal 2014). In line with this, employees’ psychological contract fulfillment means that the employer has met the employees’ expectations, which in turn boosts the employees’ sense of identity towards the job and increases their job involvement.

In addition, the affective events theory provides a theoretical framework to understand psychological contract effects on work outcomes (Weiss and Cropanzano 1996; Zhao et al. 2007; Wei and Si 2013). Weiss and Cropanzano (1996) argued that after a positive or negative workplace event, individuals would not develop rational appraisals immediately. Instead, individuals usually responded by lasting affective reactions. Once triggered, these emotional responses would influence a number of relational job attitudes and behaviors. Accordingly, psychological contract fulfillment might be a significant positive workplace event that induces affective reactions. Such reactions may increase job involvement because psychological contract fulfillment satisfies the employees’ psychological needs, and enhances their identification with the job.

Job involvement has been considered a key to motivation and goal-directed behavior. For migrant workers, work activities consume a large proportion of their time in the city, and they may be stimulated by and drawn deeply into their work mentally and emotionally (Brown 1996). Because a cognitive state of identification with the job, based on perceptions of its potential for satisfying salient psychological needs, precedes and then triggers motivational processes that influence motivation, effort, and ultimately performance (Brown 1996: 239). For example, Keller (1997) found that job involvement was a stronger predictor of job performance by longitudinal data. Besides, Diefendorff et al. (2002) stated that job involvement was a significant predictor of supervisor ratings of in-role performance. As mentioned above, job involvement might mediate the relationship between psychological contract fulfillment and job performance.

Labor Contract as Moderators

As the mainstay in employment relations, contracts establish inducements and contributions basic to membership in an organization, which include implied and legal labor contracts (Rousseau 1989; Weakliem 1989). Since labor contracts cannot cover all the aspects of employment relationship, a psychological contract, based on trust and commitment, can fill the gap left by the labor contract, and thus reduce the sense of insecurity of both parties (Cai and Jia 2009). For example, a noteworthy character of migrant workers in the construction industry is that the majority of migrant workers find their jobs in the cities through Guanxi (Thiel 2010; Wang et al. 2014), a social
network tie drawing on connections in China (Luo et al. 2012). It is common especially in the immature labor market such as the constructing industry when the construction enterprises always subcontract work out to different construction teams (Becker 2012), and migrant workers think *guanxi* is a good way to lower environment uncertainty. In this context, the contractor and migrant workers in the construction team trust each other (Cai and Jia 2009). According to the social exchange theory, trust in the employer will enhance a positive relationship between psychological contract fulfillment and work outcomes (Colquitt et al. 2013). Then, migrant workers will work harder to return the favor especially when there is no clear description about mutual obligation by the labor contract. Several studies have considered labor contract effects on the relationship between psychological contracts and work outcomes. For example, from the psychological contract theory perspective, De Cuyper and De Witte (2006) or Guest et al. (2010) found that there was significant difference of work outcomes among different contract type workers.

**Objectives**

This paper was conducted with the objective of examining the effect of psychological contract fulfillment on migrant workers’ job involvement and job performance, and how the interaction between psychological contract and labor contract dynamically influences migrant workers’ job involvement and job performance during China’s transition period. This paper contributes to the current literature in two ways. First, it extends the psychological contract research by investigating the interaction between psychological contract and labor contract and how the interaction influences employee work outcomes. Furthermore, migrant workers’ perceived that psychological contract fulfillment is rooted in Chinese traditional culture *guanxi* (Luo et al. 2012). Thus, this paper provides an important integration of culture roots and institution into individualistic, variable-orientated approach. Second, the present paper provides a more rigorous empirical examination of relationships between psychological contracts and work outcomes by collecting data from multiple sources in a sample of migrant workers and their supervisors in China.

**METHODOLOGY**

**Sample and Procedure**

Migrant workers working in a southern city of China were recruited to participate in the present paper. Separate questionnaires were administered to migrant workers and their supervisors. A total of 85 questionnaires were distributed to supervisors. Each supervisor was asked to evaluate the job performance of 5 immediate migrant workers. With the assistance of supervisors, the researchers distributed 425 immediate migrant workers’ questionnaires. Before the questionnaires were distributed, these migrant workers received a letter from the human resources department which assured them anonymity and voluntary participation. The migrant workers survey included questions assessing demographics, psychological contract fulfillment and job involvement. Finally, 71 supervisor questionnaires and 335 subordinate migrant worker questionnaires were received, for response rates of 83.5 and 78.8 percent, respectively. After deleting records with unmatched supervisor-subordinate pairs, a total of 305 supervisor-subordinate dyads (305 subordinate migrant workers and 61 supervisors) remained. Of the 305 respondents, 92.1 percent were male. Respondents reported an average age of 30.63 years, an average tenure of 7.46 years. Only 55.2 percent migrant workers signed a labor contract.

**Measures**

With the exception of the psychological contract fulfillment variable, the study variables were assessed using a 5-point Likert scale (1 = totally disagree, 5 = totally agree). The back-translation procedure was used to ensure the accuracy and semantic equivalence of the measure in the Chinese and the English versions (Brislin 1980).

Psychological contract fulfillment was assessed with nine items using the scale developed by Zhang and Agarwal (2009) and Chen et al. (2007). Participants rated the extent to which the promised obligations made to them were fulfilled (-2 = get much less than promised to 2 = get a lot more than promised). The sample items were “Opportunity to learn” and “Regular benefits and extras”. Cronbach’s alpha for the scale was .85 in the present research.
Job involvement was measured using the Hackman and Lawler (1971) three-item scale. The sample items were “Work is the most important thing in my life” and “I am very much personally involved in my work”. Cronbach’s alpha was .67 for the scale in the present research.

Supervisors rated subordinate migrant workers’ job performance using the Farh and Cheng (1997) four-item scale. The sample items were, “This subordinate works very well as part of the team” and “This subordinate always completes job assignments on time”. Cronbach’s alpha was .87 for the scale in the present research.

A dichotomization was used with migrant workers who signed a labor contract contrasted to those who did not (1 = migrant workers who signed labor contract; 0 = migrant workers without labor contract). The human resource manager provided this information for all the migrant workers.

Migrant workers’ gender, age, duration of employment in the industry and weekly working time were used as control variables in the analysis.

RESULTS

Means, standard deviations, and bivariate correlations among studied variables are reported in Table 1. As can be observed from Table 1, psychological contract fulfillment was positively correlated with job involvement (r=.26, p<.01) and job performance (r=.17, p<.01), and job involvement was positively correlated with job performance (r=.21, p<.01). These findings provided preliminary support for the hypothesized relationships.

As suggested by Anderson and Gerbing (1988), the researchers followed the two-stage structural equation modeling (SEM) approach to test the hypothesized model. The first step involved analyzing the factor structure of the key variables to establish discriminant validity. In the second step, the researchers tested the hypothesized structural model.

Measurement Model

The hypothesized measurement model had a good fit with the observed data (see Table 2). The standardized path estimates of the manifest indicators (ranging from 0.54 to 0.89) were all statistically significant. The researchers also compared the hypothesized three-factor model with a single-factor model and a two-factor model (see Table 2). The hypothesized model produced a significant improvement in chi-squares, suggesting a better fit than the other two competing models.

Structural Model

Consistent with Anderson and Gerbing’s (1988) recommendations for examining mediation models, the researchers compared two competing

Table 1: Means, stand deviations, and bivariate correlations of key variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>S.D</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>30.63</td>
<td>6.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Years in industry</td>
<td>7.46</td>
<td>5.00</td>
<td>.71**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Weekly working hours</td>
<td>51.69</td>
<td>11.80</td>
<td>.33**</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Labor contract status</td>
<td>0.54</td>
<td>0.50</td>
<td>-.06</td>
<td>-.01</td>
<td>-.43**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Psychological contract fulfillment</td>
<td>2.89</td>
<td>0.68</td>
<td>-.03</td>
<td>-.02</td>
<td>-.29**</td>
<td>.19**</td>
<td>(.85)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Job involvement</td>
<td>3.12</td>
<td>0.76</td>
<td>.04</td>
<td>.01</td>
<td>-.02</td>
<td>.11</td>
<td>.26**</td>
<td>(.67)</td>
<td></td>
</tr>
<tr>
<td>7. Job performance</td>
<td>3.24</td>
<td>0.91</td>
<td>.14*</td>
<td>.14*</td>
<td>-.02</td>
<td>.05</td>
<td>.17**</td>
<td>.21**</td>
<td>(.87)</td>
</tr>
</tbody>
</table>

Note: Cronbach’s alphas are reported in the parentheses on the diagonal. *p < .05. **p < .01.

Table 2: Comparison of measurement models

<table>
<thead>
<tr>
<th>Models</th>
<th>÷ 2</th>
<th>df</th>
<th>÷ 2/df</th>
<th>ΔX²</th>
<th>CFI</th>
<th>GFI</th>
<th>TLI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model-three factor factor</td>
<td>184.18</td>
<td>101</td>
<td>1.82</td>
<td>0.95</td>
<td>0.93</td>
<td>0.94</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>Competing model-two factor</td>
<td>322.86</td>
<td>103</td>
<td>3.14</td>
<td>138.7**</td>
<td>0.86</td>
<td>0.87</td>
<td>0.84</td>
<td>0.08</td>
</tr>
<tr>
<td>Competing model-one factor</td>
<td>872.19</td>
<td>104</td>
<td>8.39</td>
<td>549.3**</td>
<td>0.52</td>
<td>0.70</td>
<td>0.45</td>
<td>0.16</td>
</tr>
</tbody>
</table>

Note: Competing model-two factor: integrating job involvement and job performance into one factor; competing model-one factor: integrating all three factors into one factor. *p < .05. **p < .01.
models, a full mediation model and a partial mediation model. For the full mediation model, the researchers specified paths from psychological contract fulfillment to job involvement, from job involvement to job performance. The hypothesized structural model (Model A) had an acceptable fit, Chi-square $\chi^2 (102, N=305) = 186.07, p < .01$, Chi-square/degrees of freedom ($\chi^2/df$) = 1.82, Comparative fit index (CFI) = .95, Goodness-of-fit index (GFI) = .93, Tucker-Lewis index (TLI) = .94, and Root-mean-square error of approximation (RMSEA) = .05. All the hypothesized paths were statistically significant ($p < .01$).

In order to examine the partial mediation model (Model B), the researchers added one path representing direct effects: linking psychological contract fulfillment and job performance. All the predicted paths were significant, with the exception of the path linking psychological contract fulfillment and job performance ($r = .14, ns$). The chi-square difference test suggested that adding this path did not provide better fitting models to the data, $\chi^2$ diff (1) = 1.89, ns. Thus, the full mediation model (Model A) was accepted as the final model (see Fig. 1).

Figure 1 shows that psychological contract fulfillment was positively related to job involvement ($r = .25, ** p < .01$), and job involvement was positively related to job performance ($r = .34, p < .01$). Bootstrap estimation procedure in Analysis of Moment Structure (AMOS) (Macho and Ledermann, 2011) revealed that there was a positive indirect relationship between psychological contract fulfillment and job performance through job involvement (indirect effect = .10, 95% bias-corrected bootstrap Confidence interval [0.04, 0.19]).

**Moderating Analysis**

In line with Aiken and West’s (1991) guidelines for moderated regression, the independent variable was centered at its mean prior to the creation of the interaction terms. The results of the moderated regression are presented in Table 3. Entry of the interactive term resulted in a significant increase in variance explained in predicting job involvement ($\Delta R^2 = .02, p < .01$). The researchers plotted job involvement scores at two conditional values of labor contract status (Aiken and West 1991). Figure 2 shows a stronger positive relationship between psychological contract fulfillment and job involvement for those who did not sign a labor contract, $\beta = .43, p < .01$, relative to those who signed it, $\hat{\beta} = .20, ns$. Thus, labor contract status moderated the relationship between psychological contract fulfillment and job involvement, such that the positive relationship was stronger for migrant workers who did not sign a labor contract, compared with those who did.

**Table 3: Results of regression analysis of moderation effect**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Job involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.12</td>
</tr>
<tr>
<td>Age</td>
<td>.06</td>
</tr>
<tr>
<td>Years in industry</td>
<td>.01</td>
</tr>
<tr>
<td>Weekly working hours</td>
<td>-.04</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.02</td>
</tr>
<tr>
<td><strong>Direct Effect</strong></td>
<td></td>
</tr>
<tr>
<td>Psychological contract fulfillment (PCF)</td>
<td>.25**</td>
</tr>
<tr>
<td>Labor contract status</td>
<td>.14</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.07</td>
</tr>
<tr>
<td><strong>Moderation Effect</strong></td>
<td></td>
</tr>
<tr>
<td>PCF $\times$ Labor contract status</td>
<td>.21**</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.02</td>
</tr>
<tr>
<td>Total $R^2$</td>
<td>0.02</td>
</tr>
<tr>
<td>$F$</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Note: N = 305, * p < .05, ** p < .01.

In addition, the researchers analyzed the effect of labor contracts on the psychological contract dynamics through an open-ended question in the survey data. An open-ended question asked respondents: ‘what is the main reason why you signed a labor contract or not with the em-
Based on a content analysis of migrant workers’ reasons, the researchers focused on the two most frequent reasons as follows. ‘I don’t care about signing a labor contract or not if only my employer keep his promises’; and ‘due to rigid contents of labor contract ordered by law and firms’ pay systems, it is more flexible to negotiate income individually without a labor contract.’ This qualitative data indicated that migrant workers would devote more effort to their job while the employers fulfilled their expectations especially when they did not sign a labor contract.

DISCUSSION

The current research was designed to understand the interaction effects of the psychological contract and labor contract in predicting Chinese migrant workers’ job involvement and job performance. The results showed that job involvement fully mediated the relationship between migrant workers’ perception of psychological contract fulfillment and job performance. In addition, labor contract status moderated the relationship between psychological contract fulfillment and job involvement, such that the positive relationship was stronger for those migrant workers who did not sign a labor contract, compared with those who did.

These findings have several theoretical implications. First, the current research built on previous research regarding emotional reactions toward psychological contract fulfillment and the effects on job performance. Specifically, the research results showed that job involvement fully mediated the effect of psychological contract fulfillment on job performance. This was consistent with previous research that reported the positive relationship between psychological contract fulfillment and job involvement or job performance (Agarwal 2014; Shih 2014). However, the mediating role of job involvement supported affective events theory and the assertion that positive affective reactions are a likely consequence of psychological contract fulfillment. Both incur higher job performance (Wei and Si 2013).

Second, although previous researches have discussed the significant difference of work outcomes among different contract type workers from the psychological contract perspective, little effort has been devoted to empirically examine how this effect is manifested for Chinese migrant workers. The present research addressed this gap by demonstrating the interaction effects of the psychological contract and labor contract in predicting Chinese migrant workers’ job involvement. That is to say, the positive relationship between psychological contract fulfillment and job involvement was stronger for migrant workers who did not sign a labor contract compared with those who did. This finding suggests that in the absence of rigid labor contract protection, high quality social exchange between employers and migrant workers facilitates the positive effect of a psychological contract on migrant workers’ job involvement. This could be explained by traditional Chinese culture Guanxi. As previous empirical research expected, most Chinese migrant workers in the construction industry find a job through their social network (guanxi), which in turn has a significant and positive effect on their employment relationship quality (Swider 2015; Wang 2014). Thus, this finding might provide explanations to why psychological contract acted as a useful framework in the employment relations’ research (Guest 2004). During China’s transition period, legal labor protection for migrant workers has been usually weak, and the psychological contract plays an important role in the formation of a high quality employment relationship (Zhou et al. 2003).

However, this paper also suffered from several limitations. Firstly, labor contract status is only one possible moderator between the relationship of psychological contract fulfillment and job in-
volvement. Future researchers should examine more moderators and mediators regarding the government regulations’ effect on labor relations. Secondly, a new generation of relatively well-educated Chinese migrant workers, characterized by different values, has developed different expectations or psychological contract. Future studies may examine the relationships among the study variables for the old and new generation of migrant workers. Moreover, qualitative research methods such as business anthropology are needed to interpret the research results and to uncover the effect of informal social ties on construction migrant workers’ management.

CONCLUSION

The present research developed a general model to understand the interaction effects of the psychological contract and labor contract in predicting Chinese migrant workers’ job involvement and job performance. More specifically, job involvement mediated the relationship between migrant workers’ perception of psychological contract fulfillment and job performance. In addition, the positive relationship between psychological contract fulfillment and job involvement was stronger for migrant workers who did not sign a labor contract. The results supported the hypothesized model and extended the knowledge of migrant workers’ work outcomes by integrating the conjunct effects of government labor relations regulation and psychological contracts rooted in Chinese traditional culture. Future researches can recast the findings by considering generation effects, as well as other cultural or institutional factors.

RECOMMENDATIONS

The present research results provided management implications for those industries characterized by migrant labor and informal employment, such as the construction sites. Construction is a labor-intensive activity with the experience, as well as job involvement of the workforce that largely determine the quality of the construction products. Thus, as perception of psychological contract fulfillment influences migrant workers’ job performance through the mediating role of job involvement, managers should pay attention that the psychological contract plays a pivotal role in migrant workers’ daily management. In addition, although the labor contract law implemented from January 2008, most migrants still work under informal employment conditions without formal written contracts and they depend strongly on guanxi to protect them from non-payment and violence. Thus, the security function of a labor contract is replaced by a sense of mutual trust between the employer and migrant workers, which facilitates the positive effects of psychological contract fulfillment on job involvement. Accordingly, managers should implement some people-oriented management practices beyond government regulation on labor relations to enhance the social exchange quality in the employment relationship.

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