



The Effect of Job Insecurity on Performance: Evidence from a Meta-Analytic Review

ZHAO Ning, ZHANG Li, CHEN Long

School of Management, Harbin Institute of Technology, P.R.China, 150001

Abstract: An increasingly competitive market environment has made the phenomenon of job insecurity notably more prominent. This has not only triggered employees' concerns about job continuity and quality, but also influenced job performance. Based on a job demands-resources (JD-R) model, this study constructs a mediation model and uses a path analysis to examine the ways in which emotional exhaustion and work engagement mediate between job insecurity and performance. Moreover, a quantitative review of the relationship between job insecurity and job-related outcomes is provided. The results show that job insecurity is negatively related to aspects of well-being, such as job satisfaction, and positively related to negative variables, such as emotional exhaustion. This study uses path analysis to verify the mediating roles that emotional exhaustion and work engagement play between job insecurity and job performance. How job insecurity influences performance through emotional exhaustion and work engagement is shown using the JD-R model. This allows organisations to use skill training to increase job resources and psychological counselling to decrease the negative effects of job insecurity on job performance.

Keywords: Job insecurity, Job performance, Emotional exhaustion, Work engagement

1 Introduction

The antecedents of job performance have always been a key issue for enterprises, and job insecurity has become ubiquitous due to increasingly frequent corporate restructuring, mergers and layoffs. Thus, a number of researchers have investigated the relationship between job performance and job insecurity [1, 2]. The overall conclusion from these studies has been that the validity of job insecurity as a predictor of job performance is quite low [2]. Therefore, a stream of studies have explored the boundary conditions between job insecurity and job performance. For example, employees with low self-efficiency and high uncertainty avoidance have been found to exhibit low job

performance when facing job insecurity [2].

Limited research has examined how job insecurity influences job performance from the perspective of job demand and resource model, with studies mainly explain the relationship between job insecurity and job performance from other perspective. For example, Huang and Niu et al. (2012) constructed a mediating model based on affective events theory and proved that the effect of cognitive job insecurity on job performance was partially through affective job insecurity [3]. Staufenbiel and König (2010) examined the mediating role played by job attitude between job insecurity and job performance [4]. Following a focus on the conservation of resources framework, Selenko and Mäkikangas et al. (2013) illustrated that job insecurity influenced job performance through vigour [5].

Since meta-analysis can synthesise many scholars' findings to make the results of hypothesis testing more robust [6]. Our literature search reveals that existing meta-analysis articles on job insecurity involved outcomes such as job satisfaction, organisational commitment, turnover intention, trust, performance and mental and physical health [7, 8]. The last meta-analysis on job insecurity collected the literature before 2006, and research on job insecurity has developed rapidly since then. Moreover, with the transition of employees' concerns from long- to short-term employment, their reaction to job insecurity will become increasingly weaker [9]. Thus, it is necessary to conduct a quantitative review of job insecurity.

This study has two objectives. The first is to conduct a quantitative review on the relationship between job insecurity and work-related outcomes. The second is to build a model of job insecurity's influence over job performance from the perspective of job demand-resource (JD-R) theory and test the model using a path analysis. Through this study, we have two contributions to existing literature. First, this study helps to clarify the effect of job insecurity on work-related attitude and behaviour. Second, this study can help explain the mechanism of the impact of job insecurity on job performance from the perspective of job demand-resource (JD-R) theory.

Supported by the National Natural Science Foundation of China (71472054)

2 Theory and Hypothesis

2.1 The relationship between job insecurity and its outcomes

Job insecurity is a sense of powerlessness in maintaining desired continuity in a threatened job situation [10]. Early research defined job insecurity as a single dimension, but as the field has grown, many scholars have proposed that job insecurity is a multidimensional construct that includes quantity and quality job insecurity [11]. There are two views explaining the relationship between job insecurity and its outcomes. The first regards job insecurity as a negative stressor that reduces employees' job satisfaction and mental health [12, 13]. The second regards job insecurity as a positive stressor that can increase employees' creativity in the moderate condition [14].

Similar to the first view, we consider job insecurity to be a negative stressor. Under the framework of challenge and hindrance stressors, job insecurity acts as a type of hindrance stressor that can prevent personal growth [15]. According to transactional stress theory, employees conduct cognitive appraisals of the events they encounter when interacting with the environment [16]. Whether the changes in the environment are related to the employees or their own interests directly affects their coping behaviour and job attitudes. As job insecurity can constrain employees' growth and progress, employees may respond with negative attitudes and behaviour. Therefore, job insecurity is negatively related to aspects of well-being such as job satisfaction, organisational commitment and trust, and positively related to emotional exhaustion and turnover intention. We also explain the negative role played by job insecurity from the perspective of job adaptation theory [8]. Employees adopt adaptive behaviour to ease an adverse working environment. For example, employees can escape a negative stressor such as job insecurity by decreasing organisational commitment and increasing turnover intention. The meta-analyses of Cheng and Chan (2008) and Sverke (2002) revealed that job insecurity was negatively related to well-being and positively related to turnover intention [7, 8]. Therefore, we hypothesize that:

H₁: Job insecurity is negatively related to job satisfaction, organisational commitment, trust, work engagement and organisational citizenship behaviour and positively related to emotional exhaustion and turnover intention.

2.2 Theoretical rationale for examination of mediator variables

Demerouti et al. (2001) divided working conditions into job demands and job resources [17]. Job demands, such as workload or time pressure, require employees to mobilise mental and physical resources. This process leaves employees emotionally exhausted [18]. Job resources, such as job control, can increase employees' work engagement, which refers to a positive work-related emotional and cognitive state characterised

by vigour, dedication and absorption [19]. Vigour is characterised by high levels of energy and mental resilience while working, the willingness to invest effort in one's work and persistence even in the face of difficulty. Dedication refers to being strongly involved in one's work and experiencing states of significance, enthusiasm and challenge. Absorption is characterised by being fully concentrated on and happily engrossed in one's work, such that time passes quickly. Emotional exhaustion can decrease job performance, whereas work engagement improves it [19]. According to the JD-R model, job insecurity is equated with a decrease in job resources, which in turn reduces work engagement. Job insecurity can also hinder job demands, which can increase emotional exhaustion [20]. All of the abovementioned changes influence job performance. Therefore, we hypothesize that:

H₂: Work engagement mediates the relationship between job insecurity and job performance;

H₃: emotional exhaustion mediates the relationship between job insecurity and job performance.

3 Method

3.1 Literature Search

The search for published studies involves computer and manual methods. The keywords for our search are *job security* and *job insecurity*. The time frame is 1980 to 2013. Computerised searches are conducted in the following databases: PsycINFO, ABI/INFORM, Social Science Citation Index, Medline, Elsevier Science, EBSCO, Science Direct, CNKI (China National Knowledge Infrastructure), Wanfang and VIP database. A manual search is conducted of 31 academic journals including *Academy of Management Journal*, *Academy of Management Review*, *Administrative Science Quarterly* and so on.

In addition to the abovementioned published articles, we also search unpublished articles, such as dissertations. Moreover, we inspect the reference lists of existing meta-analytic articles to locate additional studies [7, 8]. We search 249 studies (198 English studies, 51 Chinese, 232 published and 12 dissertations).

3.2 Inclusion Criteria

The studies included in the meta-analysis satisfy three requirements. First, they measured job insecurity using self-report scales. Second, they included at least one of the criterion variables of interest. Finally, they reported correlations or other statistics that could be transformed into correlation coefficients. Moreover, because we pay attention to the relationship between job insecurity and work-related outcomes, the studies focused on a working population.

The abovementioned process provides 15 Chinese studies and 153 English studies-20 more overall than in Cheng and Chan's research (2008) [8]. The 168 studies contain 198 independent research projects and 204,465 employees. Studies reporting on the relationship between

job insecurity and its criterion variables such as voice and creativity are excluded because the number of these studies is less than 3 [6]. As job involvement reflects employees' psychological identities and the importance of self-image in the work environment, the main determinant of job involvement is employees' work value, which is learned in the early socialisation process. Therefore, job involvement changes little with the passage of time, and job insecurity has little effect on job involvement [21]. Thus, it is not very meaningful to analyse the relationship between these two variables and 14 studies are excluded.

3.3 Coding Procedure

Two graduate students from the School of Management code the 198 independent studies. Each student records sample size, correlations and other statistics that can be transformed into correlation coefficients. The consistency of these two students' initial coding is more than 90%. In coding, the coder discusses any inconsistencies. Thus, if one study reported multiple correlation coefficients on a variable, we calculate a mean value [3]. For example, if a study reported the relationship between job insecurity and task performance and that between job insecurity and peripheral performance, we use the mean value instead of the relationship between job insecurity and job performance. For longitudinal studies, only the first-wave data are considered.

3.4 Meta-Analytic Procedure

We conduct our meta-analysis using *Comprehensive Meta-Analysis 2.0* software, which was developed by a professional team and produces a confidence interval according to the user's need. The basic algorithm of this software includes three steps that reflect the method established by Hedges and Vevea (1998) [22]. The first step is to transform the Pearson correlation into Fisher's Z score. The second step is to compute the mean value of Fisher's Z score, weighted by sample size. The third step is to transform Fisher's Z score back into a Pearson correlation and correct by the sampling error. Similarity to Hunter and Schmidt's method (1990), this method is a random effect model that considers the variations between studies [22]. Hall and Brannick (2002) found that these two methods had similar statistical power [23]. *Comprehensive Meta-Analysis 2.0* can output the results of homogeneity tests, which facilitate our selection between a random- and a fixed-effect model. If the homogeneity is significant, we use a fixed-effect model. Otherwise, we use a random-effect model.

4 Results

We calculate effect size using a random-effect model and Tab.1 shows the relationship between job insecurity and work-related outcomes, including number of independent studies, total number of samples, corrected Pearson relationships, 95% confidence

intervals and mean values of Pearson relationships weighted by sample size. We determine the significance of the relationships by observing whether the confidence intervals contain zero. Tab. 2 shows that job insecurity is negatively related to job satisfaction ($r_c = -0.288$), organisational commitment ($r_c = -0.272$), trust ($r_c = -0.365$), work engagement ($r_c = -0.204$), job performance ($r_c = -0.140$) and organisational citizenship behaviour ($r_c = -0.098$), and positively related to emotional exhaustion ($r_c = 0.208$) and turnover intention ($r_c = 0.315$). All of the cases except the relationship between job insecurity and organisational citizenship behaviour are significant at the 0.05 level (the 95% confidence interval does not include zero). Therefore, job insecurity is negatively related to job satisfaction, organisational commitment, trust, work engagement and organisational citizenship behaviour and positively related to emotional exhaustion and turnover intention. H_1 is supported.

Tab.1 The relationship between job insecurity and work-related outcomes

Variable	K	N	r	r_c	95% interval	
					Lower	Upper
Job Satisfaction	92	115683	-0.262	-0.288	-0.314	-0.262
Organizational Commitment	63	40250	-0.201	-0.272	-0.303	-0.240
Trust	9	2852	-0.382	-0.365	-0.449	-0.275
Work Engagement	8	8822	-0.169	-0.204	-0.273	-0.133
Emotional Exhaustion	9	26905	0.183	0.208	0.121	0.292
Turnover Intention	59	123883	0.385	0.315	0.276	0.353
Job Performance	21	8966	-0.142	-0.140	-0.199	-0.079
Organizational Citizenship Behavior	6	1997	-0.094	-0.098	-0.205	0.011

Note: K denotes the number of independent researches, N denotes the total number of samples, r is mean value of Pearson correlation weighed by sample size, r_c is the correlation corrected by sample error, * $p < 0.05$, ** $p < 0.01$.

For the mediating role of work engagement and emotional exhaustion, we conduct a path analysis using Lisrel. Based on Viswesvaran and Ones's (1995) method, we construct a meta-analytic matrix (shown in Tab.2) in which the correlation is from recent studies [24]. If the studies did not contain these correlations, we conduct extra meta-analyses. We calculate the harmonic mean of the sample size, which is shown in Tab. 2.

Tab. 2 Meta-analytic correlations between job insecurity and related outcomes

Variable	1	2	3
1. Job Insecurity	-		
2. Work Engagement	-0.204	-	
K	8	-	
N	8822	-	
3. Emotional Exhaustion	0.208	-0.354*	-
K	9	23	-
N	26905	12349	-

4. Job Performance	-0.140	0.406 ^b	-0.200 ^c
K	21	15	24
N	8966	5797	5558

Note: K denotes the number of independent researches, N denotes the total number of samples, ^a Meta-analytic correlations from extra analyses in the current article, ^b Meta-analytic correlations from extra analyses in the current article, ^c Meta-analytic correlations from Swider and Zimmerman (2010) [25].

Tab. 3 shows the results of the path analysis. We conclude that the full mediation model a and mediation models b, c and e are not a good fit to the data, as the values of CFI and TLI are less than 0.9, and RMSEA is more than 0.08. The mediation model g, which estimates the path from emotional exhaustion to work engagement while the other paths are held constant, is a good fit to the data – better than the full mediation model a ($\Delta X^2(1) = 913.77, p < 0.001$). Fig. 1 exhibits the path selection process. Mediation model g is the final model proving that work engagement and emotional exhaustion can mediate the relationship between job insecurity and job performance. H₂ and H₃ are supported

Tab. 3 Path analysis

Model	X ²	df	CFI	TLI	RMSEA	$\Delta X^2, df$
Full Mediation Model a	939.74	2	0.74	0.21	0.23	
Mediation Model b	913.24	1	0.74	-0.55	0.33	26.5**, 1
Mediation Model c	1176.73	2	0.66	-0.01	0.26	-
Mediation Model d	63.25	2	0.98	0.95	0.06	876.49**, 0
Mediation Model e	1097.36	1	0.69	-0.88	0.38	-
Mediation Model f	28.14	1	0.99	0.96	0.06	911.6**, 1

Mediation Model g	25.97	1	0.99	0.96	0.05	913.77**, 1
-------------------	-------	---	------	------	------	-------------

Note: N=8627, CFI=comparative fit index; TLI=Tucker–Lewis index; RMSEA=root-mean-square error of approximation, “-” denotes that this model do not improve than full mediation model a, “a” examines the full mediation of emotional exhaustion and work engagement (see Fig. 1a), “b” examines the direct path from job insecurity to job performance while the other path is held constant (see Fig. 1b), “c” examines the indirect effect of job insecurity on job performance through emotional exhaustion after eliminating the direct path from work engagement to job performance (see Fig. 1c), “d” examines the indirect effect of job insecurity on job performance through work engagement after eliminating the direct path from emotional exhaustion to job performance (see Fig. 1d), “e” examines the direct path from job insecurity to job performance, while the mediation model c is held constant (see Fig. 1e), “f” examines the direct path from job insecurity to job performance, while the mediation model d is held constant (see Fig. 1f), “g” examines the direct path from emotional exhaustion to work engagement, while the full Mediation Model a is held constant (see Fig. 1f).

5 Discussion

The results of our study indicate that job insecurity is negatively related to job satisfaction, organisational commitment, work engagement and job performance. Moreover, job insecurity is positively related to emotional exhaustion and turnover intention. The relationships between job insecurity, job satisfaction and organisational commitment and turnover intention and job performance are consistent with prior research [7, 8], and the relationships between job insecurity, work engagement and emotional exhaustion are consistent with our expectation.

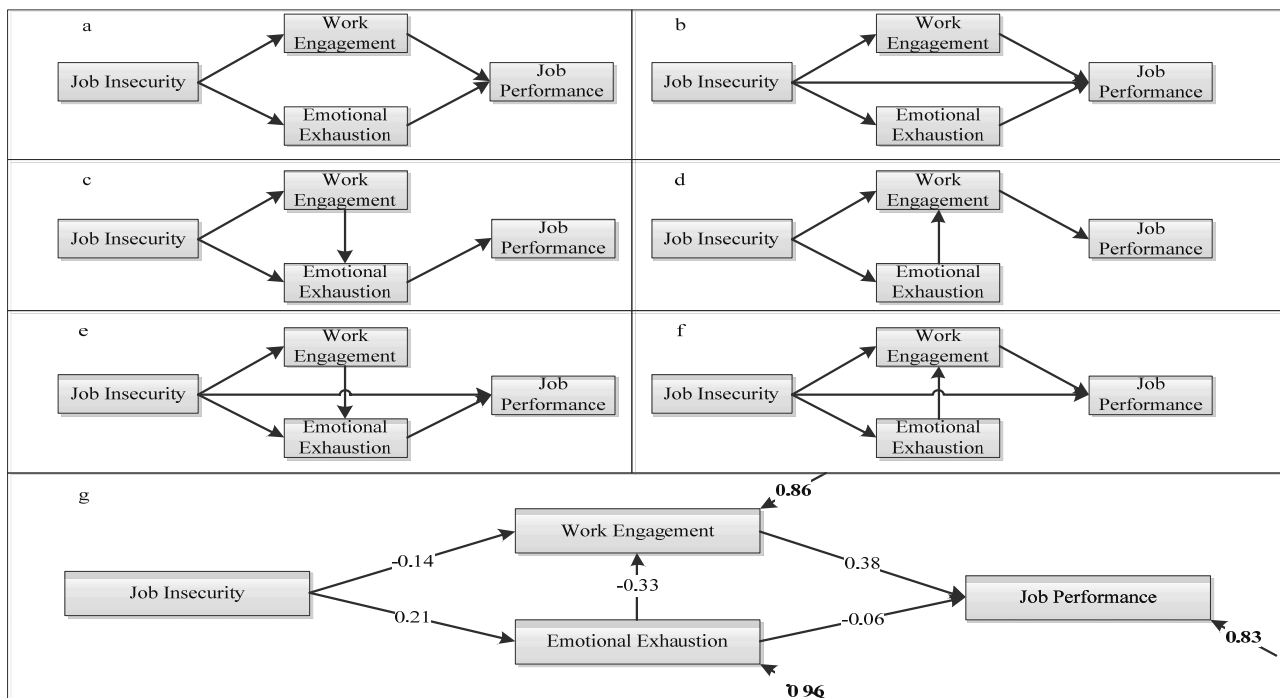


Fig. 1 The path selection of the impact of job insecurity on job performance

However, the relationship between job insecurity and organisational citizenship behaviour is not significant at the 0.05 level. Thus, we conclude that there are some moderators between job insecurity and organisational citizenship behaviour, or that the relationship is nonlinear. For example, employees' with traditional values believe in fate, obey authority and have lower control over job stress, which means that they feel a more intense threat when facing job insecurity. Hence, the relationship between job insecurity and organisational citizenship behaviour is negative [26]. Moreover, in the low job insecurity condition, employees have enough resources to exercise control, and thus they exhibit organisational citizenship behaviour to deal with job insecurity. However, in the high job insecurity condition, the relationship between job insecurity and organisational citizenship behaviour becomes negative [27], as the latter can lead to job stress, amplifying the negative effects of the former [28].

Finally, we conduct a model of job insecurity's effect on job performance, as mediated by emotional exhaustion and work engagement. We test the model using path analysis. The results show that job insecurity can influence job performance through emotional exhaustion and work engagement, because the former can be regarded as a loss of job resources and a hindrance to work demand that decreases work engagement and consumes employees' psychological resources.

6 Conclusion

This study has two theoretical implications. First, in reviewing the studies on the relationship between job insecurity and work-related outcomes, we add emotional exhaustion, work engagement and organisational citizenship behaviour into our meta-analysis. Second, based on job demand and resource modelling, we confirm the mediating roles of emotional exhaustion and work engagement between job insecurity and job performance, which clarifies the mechanism of job insecurity's effect on job performance.

Regarding practice, the results of this study may help enterprises to improve employees' performance, especially in the current situation in which job insecurity is pervasive. An enterprise can give its employees psychological support and increase job resources to enhance their performance.

In this study, we explore the relationship between job insecurity and job performance, which has theoretical implications. However, there are also some limitations to this study. First, the studies reviewed were cross-sectional, which can elicit poor results when inferring causal relationships. Future studies can test the mediation model using longitudinal data. Second, due to constraints to academic resources, some pertinent studies may have been missed. We decrease this risk, however, by using interlibrary loans and asking for help from

network platforms.

References

- [1] R. Loi, H. Y. Ngo, L. Zhang, et al. The interaction between leader-member exchange and perceived job security in predicting employee altruism and work performance [J]. *Journal of Occupational and Organizational Psychology*, 2011, 84(4): 669-685.
- [2] A. Chirumbolo, A. Areni. Job insecurity influence on job performance and mental health: Testing the moderating effect of the need for closure [J]. *Economic and Industrial Democracy*, 2010, 31(2): 195-214.
- [3] G. H. Huang, X. Niu, C. Lee, S. J. Ashford. Differentiating cognitive and affective job insecurity: Antecedents and outcomes. *Journal of Organizational Behavior*, 2012, 33(6), 752-769.
- [4] T. Staufienbiel, C. J. König. A model for the effects of job insecurity on performance, turnover intention, and absenteeism [J]. *Journal of Occupational and Organizational Psychology*, 2010, 83(1): 101-117.
- [5] E. Selenko, A. Mäkikangas, S. Mauno, et al. How does job insecurity relate to self-reported job performance? Analysing curvilinear associations in a longitudinal sample [J]. *Journal of Occupational and Organizational Psychology*, 2013, 86(4): 522-542.
- [6] Hunter, Schmidt. *Methods of meta-analysis* [M]. Calif Sage: Newbury Park, 1990.
- [7] M. Sverke, J. Hellgren, K. Näswall. No security: a meta-analysis and review of job insecurity and its consequences[J]. *Journal of Occupational Health Psychology*, 2002, 7(3): 242-264.
- [8] G. H. L. Cheng, D. K. S. Chan. Who suffers more from job insecurity? A meta-analytic review[J]. *Applied Psychology*, 2008, 57(2): 272-303.
- [9] M. S. Drenzo, J. H. Greenhaus. Job search and voluntary turnover in a boundaryless world: A control theory perspective [J]. *Academy of Management Review*, 2011, 36(3): 567-589.
- [10] L. Greenhalgh, Z. Rosenblatt. Job insecurity: Toward conceptual clarity [J]. *Academy of Management Review*, 1984, 9(3): 438-448.
- [11] J. Hellgren, M. Sverke, K. Isaksson. A two-dimensional approach to job insecurity: Consequences for employee attitudes and well-being [J]. *European Journal of Work and Organizational Psychology*, 1999, 8(2): 179-195.
- [12] N. De Cuyper, A. Mäkikangas, U. Kinnunen, et al. Cross-lagged associations between perceived external employability, job insecurity, and exhaustion: Testing gain and loss spirals according to the conservation of resources theory [J]. *Journal of Organizational Behavior*, 2012, 33(6): 770-788.
- [13] T. V. Elst, N. De Cuyper, H. De Witte. The role of perceived control in the relationship between job insecurity and psychosocial outcomes: moderator or mediator? [J]. *Stress and Health*, 2011, 27(3): 215-227.
- [14] H. Zhou, L. R. Long. Effects of job insecurity and

- creative self-efficacy on employees' creativity [J]. *Acta Psychologica Sinica*, 2011, 43(8), 929-940. (In Chinese)
- [15] M. A. Cavanaugh, W. R. Boswell, M. V. Roehling, et al. An empirical examination of self-reported work stress among US managers [J]. *Journal of Applied Psychology*, 2000, 85(1), 65-74.
- [16] S. Folkman, R. S. Lazarus. If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 1985, 48(1), 150-170.
- [17] E. Demerouti, A. B. Bakker, F. Nachreiner, et al. The job demands-resources model of burnout [J]. *Journal of Applied Psychology*, 2001, 86(3), 499-512.
- [18] C. Maslach, W. B. Schaufeli, M. P. Leiter. Job burnout [J]. *Annual Review of Psychology*, 2001, 52(1), 397-422.
- [19] A. B. Bakker, E. Demerouti, A. I. Sanz-Vergel. Burnout and work engagement: The JD-R approach [J]. *Annual Review of Organizational Psychology and Organizational Behavior*, 2014, (1), 389-411.
- [20] E. R. Crawford, J. A. LePine, B. L. Rich. Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test [J]. *Journal of Applied Psychology*, 2010, 95(5), 834-848.
- [21] S. P. Brown. A Meta-analysis and review of organizational research on job involvement [J]. *Psychological Bulletin*, 1996, 120(2), 235-255.
- [22] L. V. Hedges, J. L. Vevea. Fixed and random-effects models in meta-analysis [J]. *Psychological Methods*, 1998, 3(4), 486-504.
- [23] S. M. Hall, M. T. Brannick. Comparison of two random-effects methods of meta-analysis [J]. *Journal of Applied Psychology*, 2002, 87(2), 377-389.
- [24] C. D. S. Viswesvaran, Ones. Theory testing: Combining psychometric meta-analysis and structural equations modeling [J]. *Personnel Psychology*, 1995, 48(4), 865-885.
- [25] B. W. Swider, R. D. Zimmerman. Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes [J]. *Journal of Vocational Behavior*, 2010, 76(3), 487-506.
- [26] H. Wang, C. Lu, L. Lu. Do people with traditional values suffer more from job insecurity? The moderating effects of traditionality [J]. *European Journal of Work and Organizational Psychology*, 2012, 1-11.
- [27] S. Kaplan, J. C. Bradley, J. N. Luchman. et al. On the role of positive and negative affectivity in job performance: A meta-analytic investigation [J]. *Journal of Applied Psychology*, 2009, 94(1), 162-176.
- [28] M. C. Bolino, W. H. Turnley, J. B. Gilstrap. et al. Citizenship under pressure: What's a "good soldier" to do? [J]. *Journal of Organizational Behavior*, 2010, 31(6), 835-855.