

An Empirical Study on the Relationship between Job Insecurity and Employee Creativity

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Abstract

In this article, we sought to investigate the influence mechanism of job insecurity on employee creativity, based on the conservation of resource theory and the psychological ownership theory, this study constructs a theoretical model of mediated moderation. The research object of this paper is Chinese employees, and 363 valid samples are collected by questionnaire survey, we examined our research model. Results revealed that (a) job insecurity was negatively correlated with employee creativity; (b) knowledge hiding plays a mediating role in the relationship between job insecurity and employee creativity; (c) knowledge psychological ownership (KPO) not only moderates the relationship between job insecurity and knowledge hiding, but also moderates the mediating effect of knowledge hiding on job insecurity and employee creativity. The implications, limitations, and future research directions are also discussed.

Keywords

Job Insecurity; Employee Creativity; Knowledge Hiding; Knowledge Psychological Ownership.

1. Introduction

With the advent of the era of informatization and globalization, many organizations have gradually realized that the ability to provide innovative products and services is very important if they want to stand in the fierce external environment [1,2]. In order to cope with the impact brought by environmental changes, some enterprises often have to adopt some fierce internal competition mechanisms, such as layoffs, bottom elimination and short-term employment measures[3], but these changes may easily cause employees to have job insecurity[4]. Scholars have not reached a consistent conclusion on the relationship between job insecurity and employee creativity.

In the era of the knowledge economy, more and more enterprises invest a great deal of time and money into knowledge management activities to promote knowledge transfer among organizational members. However, a significant number of employees are still reluctant to share knowledge and even intentionally conceal the knowledge requested by their coworkers[5]. This phenomenon is called knowledge hiding[5]. Knowledge transfer between individuals is necessary for the formation of creativity, and the exchange and collision of various thinking viewpoints can produce more solutions to problems[6]. However, the knowledge hiding behavior of employees is detrimental to the speed and total amount of new knowledge acquired by individuals in the organization. Therefore, this paper explores the mechanism of the relationship between knowledge hiding on job insecurity and employee creativity in the Chinese context.

Knowledge psychological ownership is an extension of the concept of psychological ownership, which refers to the degree of psychological feeling that one regards the knowledge accumulated and created in his daily study, life or work as "my" knowledge [7]. According to psychological ownership theory, when employees with job insecurity have high KPO, they may take various

actions (such as knowledge hiding) to maintain individual ownership and control of specific knowledge resources. This study also discusses the effect of KPO on the relationship of theoretical model constructed.

In summary, we aimed to examine (a) the possible influence of job insecurity on employee creativity, (b) the mediating role of knowledge hiding in the job insecurity–employee creativity linkage, and (c) the moderating role of KPO in the relationship between job insecurity and knowledge hiding and the indirect effect of job insecurity on employee creativity through knowledge hiding.

We expect to make several contributions to theory and practice. First, this study can make the relationship between job insecurity and employee creativity more clearly and provide more explanations for the relationship between the two. Second, explore the mechanism between knowledge concealment and job insecurity and employee creativity, so as to enrich the research on knowledge hiding in Chinese context. Third, introducing the KPO as moderating variable, not only can reduce psychological ownership of research scope, and can make study more focus, further perfect the job insecurity boundary condition for creativity of the employees, but also can enrich the domestic research of KPO as moderating variable. Finally, this study provides some feasible suggestions for enterprise managers to reduce employees' job insecurity and knowledge hiding behavior, reduce employees' KPO and improve employee creativity.

2. Theoretical Background and Hypotheses

2.1. Job Insecurity and Employee Creativity

Job insecurity refers to the employee's concern about whether the current job can be maintained continuously, and the psychological feeling that the employee feels his or her job characteristics is continuously threatened [8]. Some scholars have conducted in-depth studies on the relationship between job insecurity and employee creativity, while no consistent conclusions have been reached^[9,10]. This paper holds that, from the perspective of resource conservation theory, job insecurity, as an important source of stress faced by enterprise employees, has a negative impact on employee creativity.

First of all, on the conservation of resources theory, individuals are more likely to protect their resources and suppress their knowledge transfer when facing resource loss^[11]. Secondly, too much pressure at work of employees will reduce the innovative behaviors and work performance^[12]. Improving creativity requires continuous efforts of individuals, and innovation may fail, and they have to bear the criticism or the reduction of self-cognition caused by failure, so innovative behaviors will cause more pressure on individuals. Moreover, innovative behaviors are subversive and novel behaviors, which have certain risks in themselves. Old staffs may hinder such novel behaviors, and innovative behaviors increase individual interpersonal risks to a certain extent. Individuals with high job insecurity may be less willing to take risks because conflicts with others in the organization may make them more likely to lose job opportunities, so job insecurity may inhibit individuals from producing creative ideas.

To sum up, this paper assumes that:

H1: Job insecurity has a significant negative impact on employee creativity.

2.2. The Mediating Role of Knowledge Hiding

Knowledge hiding refers to the deliberate concealment or cover up of individuals in the face of other people's knowledge consultation in the organization [5]. Studies have found that employees with high job insecurity tend to have more knowledge hiding behaviors in order to maintain resources or reduce the possibility of resource loss and reduce psychological pressure^[13]. According to the Resource Conservation Theory^[14], individuals will take a series of measures to reduce resource loss when facing with resource loss and threat. Satisfying

others' knowledge requests will cost additional input of resource information. When individuals are in a state of high job insecurity, such behaviors will be reduced^[15].

The basis for employees to generate creative ideas is to absorb knowledge, viewpoints and methods to solve problems in various fields. Creativity can only be generated when high-end knowledge reaches a certain value. When employees are in a higher job insecurity state of mind, their knowledge of resource protection hidden behavior, new methods and ideas of fusion and collision, hindered the turnover rate of knowledge and knowledge exchange between individuals^[16], individual knowledge hiding actions will make our accumulated knowledge has slowed.

Therefore, the following hypothesis is obtained:

H2: Knowledge hiding plays a mediating role in the relationship between job insecurity and employee creativity.

2.3. The Moderating Role of KPO

Knowledge psychological ownership (KPO) is an extension of the concept of psychological ownership, which refers to the degree of psychological feeling that one regards the accumulated knowledge created in his daily study, or work as "my" knowledge^[7]. The higher the KPO is, the higher the degree of possession of his own knowledge. Previous studies have shown that KPO has a positive impact on knowledge hiding^[7], which inhibited knowledge sharing among employees^[17]. The KPO has a negative impact on both core knowledge sharing and public knowledge sharing^[17]. Psychological ownership theory (Pierce et al., 2001) hold that if an individual continues to control a specific object, he will regard this object as his exclusive and will spend time and energy to invest in this target object, and the ultimate goal is to have the control of this target object.

According to the theory of resource conservation and psychological ownership theory, the worker job insecurity can strengthen the protection of resources behavior itself, when the employee's KPO is higher, they are more afraid of losing their grip on the knowledge authority. And workers with a high level of KPO can choose various methods (such as knowledge hiding behavior) to keep the continuity of resource control, which will enhance the influencing effect of job insecurity on knowledge hiding behavior; For those employees with lower KPO, they may not pay much attention to whether the knowledge requested by others in the organization is their own. As a result, they are more likely to choose knowledge hiding behavior due to their own job insecurity. That is lower psychological ownership of knowledge will weaken the employee insecurity hidden behavior of positive influence for knowledge. Therefore, this paper proposes the following hypothesis:

H3: KPO will moderate the positive relationship between job insecurity and knowledge hiding. The higher the KPO is, the stronger the positive relationship between job insecurity and knowledge hiding is.

So far, we have argued how job insecurity impairs employee creativity through knowledge hiding and hypothesized the moderating role of KPO on the job insecurity-employee creativity linkage. Based on these, we argue that KPO will conditionally influence the strength of job insecurity on employee creativity through knowledge hiding. This is because job insecurity will be more strongly correlated to knowledge hiding when KPO is higher. We accordingly propose the following hypothesis:

H4: KPO will moderate the indirect effect of job insecurity on employee via knowledge hiding, such that the effect will be stronger when PKO is high as opposed to low.

3. Methods

3.1. Sample and procedure

This research collects data with the method of questionnaire. The questionnaire had been widely used by the domestic and foreign scholars. This study first for some employees pay a certain amount of questionnaire and data analysis, adopt the method of small scales prediction research integrity analysis of the questionnaire, to ensure the feasibility of the questionnaire formal research. This study chooses the combination of online and offline investigation method, the issuing 428 questionnaire, and receiving 385 questionnaires, the questionnaire recovery rate is 90%. Through the questionnaire data sorting, eliminate invalid questionnaire, the final number of valid questionnaires of 363, effective recovery rate was 84.8%. Of the 363 employees, 44.4% were male, 98.6% were aged 45 years or younger, 74% reported a bachelor's degree, and 64.2% were ordinary employees.

3.2. Measures

The study variables were rated by employees. All measurements were in Chinese and followed the translation-back translation process^[18]. The respondents completed the measures using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

3.2.1. Job insecurity

We measured Job insecurity using Hellgren's seven-item scale^[19]. An example item is "I'm worried about losing my current job in the future." Cronbach's coefficient α was 0.90.

3.2.2. Knowledge hiding

We used Connelly et al.'s 11-item scale to measure knowledge hiding^[5]. An example item is "agreed to help him/her but never really intended to." Cronbach's coefficient α was 0.96.

3.2.3. Employee creativity

We measured Employee creativity using Tierney's seven-item scale^[20]. An example item is "I can come up with some original ideas at work." Cronbach's coefficient α was 0.95.

3.2.4. Knowledge psychological ownership

We used Ford's 3-item scale to measure knowledge psychological ownership^[21]. An example item is "I consider the knowledge and experience I have accumulated on the job to be personal." Cronbach's coefficient α was 0.88.

Table 1. Confirmatory factor analysis (CFA) of discrimination validity in Study 1

Models	Factors	χ^2	df	χ^2/df	CFI	TLI	RMSEA	SRMR
4 factors	Jl,KH,KPO,EC	1316.845	371	3.549	0.902	0.892	0.079	0.052
3 factors	Jl,KH+KPO,EC	1946.757	374	5.025	0.837	0.823	0.108	0.108
2 factors	Jl,KH+KPO+EC	3427.513	376	9.116	0.683	0.658	0.150	0.116
1 factor	Jl+KH+KPO+EC	3882.589	377	10.299	0.636	0.608	0.160	0.121

Note. + represents two factors merge into one. N =363. Jl: job insecurity; EC: employee creativity; KH: knowledge hiding; KPO: knowledge psychological ownership.

4. Results

4.1. Confirmatory factor analyses

Using AMOS 24.0, we conducted a series of confirmatory factor analyses to examine the discriminant validity of the study variables. We assessed model fit by using the model's overall chi-square, root mean square error of approximation, comparative fit index, and Tucker-Lewis index. We first examined the baseline model that included all four factors. The CFA results in

Table 1 show that comparing the baseline model with other alternative models, the four-factor model (JI,KH,KPO and EC) fitted the data best. The results therefore provided support for the discriminant validity of the four constructs in the current study.

Table 2. Mean, standard deviation, and correlation for the variables studied (N=363)

Variables	Mean	SD	Age	Gender	EB	JC	JG	JI	KH	EC
Age	1.5565	0.4975	1							
Gender	2.1157	1.0863	0.031	1						
EB	2.8567	0.8084	-0.123*	0.012	1					
JC	3.3471	1.4924	-0.078	0.279**	0.067	1				
JG	1.5069	0.7702	0.174**	-0.169**	-0.118*	-0.103*	1			
JI	2.8989	1.0288	0.113*	-0.010	-0.112*	-0.192**	-0.052	1		
KH	2.6107	1.1174	0.140**	-0.123*	-0.062	-0.192**	0.036	0.705**	1	
EC	3.2865	1.0293	-0.109*	-0.035	0.108*	0.086	0.028	-0.490**	-0.537**	1
KPO	3.2810	1.1424	0.040	-0.115*	0.064	-0.037	-0.003	0.475**	0.466**	-0.248**

Note. EB: educational background; JC: job category; JG: job grade; JI: job insecurity; EC: employee creativity; KH: knowledge hiding; KPO: knowledge psychological ownership, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.2. Descriptive statistics and correlations

We reported the means, standard deviations, and correlations for Study variables in Table 2. As shown here, job insecurity was positively correlated with knowledge hiding ($r = 0.705, p < 0.01$), employee creativity was negatively correlated with job insecurity ($r = -0.490, p < 0.01$) and knowledge hiding ($r = -0.537, p < 0.01$). The above results suggested that there was a close correlation between these variables, providing preliminary data support for the hypotheses.

4.3. Direct Hypotheses Testing

We adopted a hierarchical multiple regression analysis to examine our hypotheses. Specifically, we entered the control variables and the independent variable (job insecurity) firstly. Then mediator (knowledge hiding) was added in the second step shown in model 1 and model 2. As displayed in Table 3, we determined that job insecurity had a negative direct relationship with employee creativity (Model 2: $\beta = -0.484, p < 0.001$). Thus, Hypothesis 1 was supported.

Table 3. Results of hierarchical regression analyses (N = 363)

Variables	EC as dependent variable			KH as dependent variable		
	Model1	Model 2	Model 3	Model 4	Model 5	Model 6
Control variables						
Gender	-0.115	-0.093	-0.165	-0.194	-0.152	-0.100
Age	-0.099	-0.032	-0.005	0.074	0.076	0.077
EB	0.101	0.050	0.060	0.026	0.001	-0.026
JC	0.066	0.004	-0.005	-0.024	-0.034	-0.025
JG	0.066	0.008	0.040	0.087	0.082	0.084
Independent variable						
JI		-0.484***	-0.202***	0.763***	0.677***	0.050***
Mediator variable						
KH			-0.370***			
Moderate variable						
KPO					0.153***	0.281***
KPO \times JI						0.176***
R ²	0.029	0.247	0.325	0.521	0.539	0.572
ΔR^2	0.010	0.230**	0.307**	0.510**	0.527**	0.560**
F	1.541	14.553**	18.858**	48.085***	45.860***	46.984***

Note. EB: educational background; JC: job category; JG: job grade; JI: job insecurity; EC: employee creativity; KH: knowledge hiding; KPO: knowledge psychological ownership, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.4. Test of the Mediating Role of Knowledge Hiding

This study tests whether intermediation is established according to the method proposed by Baron and Kenny^[22], and the results were shown in Table 3. After controlling other variables, job insecurity had a significantly negative relationship with employee creativity (model 2: $\beta = 0.484$, $p < 0.001$), after intervening variable knowledge hiding join model, the effects of job insecurity and employee creativity coefficient is smaller but still significant (model 3: $\beta = 0.202$, $p < 0.001$), suggesting that knowledge hiding play an intermediary role on the relationship between job insecurity and employee creativity. So H2 was verified.

4.5. Test of the Moderating Effect of KPO

Hypothesis 3 proposed the KPO will moderate the positive relationship between job insecurity and knowledge hiding. We used regression to estimate this hypothesis, involving the product of the independent variable (JI) and moderating variable (KPO) on the mediator (KH). As indicated in Table 3, the interaction term (JI * KPO) was significantly related to knowledge hiding (model 6: $\beta = 0.176$, $p < 0.001$), which indicated that the moderation of knowledge psychological ownership on job insecurity and knowledge hiding association was positive and significant. To explain the moderated effect of KPO furtherly, we then conducted simple slope tests and plotted the statistically significant interaction according to the recommendation of Aiken and West^[23]. As specified in Fig. 1, the nature of the interactions proved our expectation that the relationship between job insecurity and knowledge hiding was stronger when KPO was at a high level than it was low. Thus, Hypothesis 3 was supported.

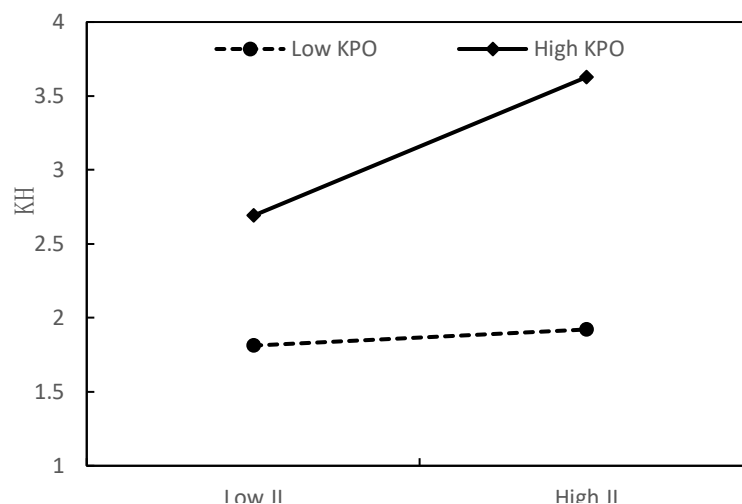


Fig. 1 The nature of the interactions

Note. JI: job insecurity; EC: employee creativity; KH: knowledge hiding; KPO: knowledge psychological ownership.

To test the moderated mediation in Hypothesis 4, we employed bootstrap estimates and conducted a bias-corrected CI (95%) to examine the indirect effects of job insecurity on employee creativity at two levels of knowledge psychological ownership (-1 standard deviation and $+1$ standard deviation). The results showed that the indirect influence of job insecurity on employee creativity via knowledge psychological ownership was significant in case of high individual KPO (conditional indirect effect = 0.828 , boot SE = 0.054 , 95% bootstrap CIs from 0.723 to 0.935), while under the condition of low level of KPO, the indirect effect became smaller (conditional indirect effect = 0.427 , boot SE = 0.066 , 95% bootstrap CIs from 0.297 to 0.557). Taken together, knowledge psychological ownership moderates the mediated relationship between job insecurity and employee creativity. Thus, Hypothesis 4 was supported.

5. Discussion

This study examined the relationships among job insecurity, knowledge hiding, employee creativity, and knowledge psychological ownership and reached the following conclusions: (a) job insecurity was negatively correlated with employee creativity; (b) knowledge hiding plays a mediating role in the relationship between job insecurity and employee creativity; (c) knowledge psychological ownership not only moderated the positive influence of job insecurity on knowledge hiding but also strengthened the indirect relationship of job insecurity on employee creativity through knowledge hiding. Specifically, the higher an employee's KPO level was, the stronger the impact of job insecurity on employee creativity through knowledge hiding would be.

5.1. Theoretical Implications

There have been researches on the relationship between job insecurity and employee creativity, but no consistent conclusions have been drawn. First, based on the influencing factors of creativity, this paper proposes a comprehensive theoretical model to explain the relationship between job insecurity and employee creativity, thus providing more possible explanations for the relationship between the two. Second, this paper integrates the conservation of resource theory and psychological ownership theory view reveals the knowledge hiding in mediating role between job insecurity and employee creativity, this study can not only rich knowledge hiding research, but also to the mechanism of action between job insecurity and employee creativity provides more likely. Third, this study introduces the situational variable of knowledge psychological ownership to build a model of moderated intermediary between job insecurity and employee creativity, and fills in the research on the influence of job insecurity on employee creativity from the perspective of psychological ownership. At the same time, it also narrates the research scope of psychological ownership, makes the research more concentrated, and enriches the domestic research on psychological ownership as a moderating variable.

5.2. Practical Implications

In addition to theoretical contributions, this research has some practical significance and values. First, since job insecurity has a negative impact on employee creativity, managers should reduce job insecurity among employees. Managers should optimize the organizational structure and build a reasonable competition mechanism, such as setting up more reasonable work for employees, broadening personal promotion channels, increasing employee training, and setting up a reasonable assessment mechanism to make employees' work emotional stability as far as possible. Second, knowledge hiding can hinder knowledge transferring, harm creativity. For business managers, this means that it is even more necessary to cultivate an environment in which knowledge is shared independently. Relevant measures include taking the initiative to share knowledge and experience, creating a fair and positive competitive atmosphere, and advocating team learning. Third, managers should pay attention to the psychological ownership of employees and reduce the KPO of employees. Enterprises should encourage the members of the organization to learn together, so as to reduce the KPO at the individual level. Specifically, managers can reduce the KPO of employees by enhancing the team cooperation atmosphere, advocating the collective ownership of knowledge in the organization, holding group activities and improving the collective belonging of employees.

5.3. Research Limitations and Prospects

This present study has several limitations that ought to be considered or solved by future research. First, our research examined the proposed model only in one stage. We did not gather data over an extended period, lack of dynamic studies across time periods. To justify the cause-

and-effect relationship, conducting the longitudinal research allows to obtain reliable results, and examine the changes in employee creativity result from the implementation of job insecurity practices.

The second limitation concerned the use of self-reported measures. We tried to minimize the risks of self-report by assuring the respondents of anonymity. we still encourage other researchers to replicate the present work by collecting data from employees and employers. If this study is further improved in the future, employee creativity can be filled in by leaders, and the other three variables can be filled in by employees.

Third, though the investigation data support the hypothesis of this article, but involved sample worker is relatively young age, as a result of the limitation of resources sample worker mostly in Shanghai, Jiangsu and other regions, so the universality of the research results may be limited by certain effect, and the enterprise actual development plan is not easy to study. Therefore, future studies can be more diverse research methods greater sample size to further explore job insecurity, knowledge hiding, employee creativity and other situational variables.

References

- [1] Zhou J, Hoever I J: Research on workplace creativity: a review and redirection. *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 1 (2014) No.1, p.333-359.
- [2] Shalley C E, Gilson L L, Blum T C: Matching creativity requirements and the work environment: Effects on satisfaction and intentions to leave. *Academy of management journal*, Vol. 43 (2000) No.2, p.215-223.
- [3] Sverke M, Hellgren J: The nature of job insecurity: understanding employment uncertainty on the brink of a new millennium. *Applied Psychology*, Vol. 51 (2002) No.1, p.23-42.
- [4] Cheng H L G, Chan K S: Who suffers more from job insecurity? A meta-analytic review. *Applied Psychology*, Vol. 57 (2008) No.2, p.272-303.
- [5] Connelly C E, Zweig D, Webster J, et al: Knowledge hiding in organizations. *Journal of Organizational Behavior*, Vol. 33 (2012) No.1, p.64-88.
- [6] Hammond M M, Neff N L, Farr J L, et al: Predictors of individual-level innovation at work: A meta-analysis. *Psychology of Aesthetics, Creativity, and the Arts*, Vol. 5(2011) No.1, p.90-105.
- [7] Peng H: Why and when do people hide knowledge. *Journal of Knowledge Management*, Vol. 17 (2013) No.3, p.398-415.
- [8] Greenhalgh L, Rosenblatt Z: Job insecurity: Toward conceptual clarity. *Academy of Management Review*, Vol. 9 (1984) No.3, p.438-448.
- [9] Conti A R: Changes in the work environment for creativity during downsizing[J]. *Academy of Management Journal*, Vol. 42 (1999) No.6, p.630-640.
- [10] Probst T M, Stewart S M, Gruys M L, et al: Productivity, counterproductivity and creativity: the ups and downs of job insecurity. *Journal of Occupational & Organizational Psychology*, Vol. 80 (2011) No.3, p.479-497.
- [11] Hobfoll S E: Social and psychological resources and adaptation. *Review of General Psychology*, Vol. 6 (2002) No.4, p.307-324.
- [12] Saleem M, Tufail M, Atta A, et al: Innovative workplace behavior, motivation level, and perceived stress among healthcare employees. *Pakistan Journal of Commerce and Social Sciences*, Vol. 9 (2015) No.2, p.438-446.
- [13] Serenko A, Bontis N: Understanding counterproductive knowledge behavior: antecedents and consequences of intra-organizational knowledge hiding. *Journal of Knowledge Management*, Vol. 20 (2016) No.6, p.1199-1224.
- [14] Hobfoll S E: Social and psychological resources and adaptation. *Review of General Psychology*, Vol. 6 (2004) No.4, p.307-324.

- [15] Kaplan S, Bradley J C, Luchman J N, et al: On the role of positive and negative affectivity in job performance: a meta-analytic investigation. *Journal of Applied Psychology*, Vol. 94 (2009) No.1, p.162-176.
- [16] Cerne M, Nerstad C G L, Dysvik A, et al: What goes around comes around: Knowledge hiding, perceived motivational climate, and creativity. *Academy of Management Journal*, Vol. 57 (2014) No.1, p.172-192.
- [17] Ning L: Knowledge sharing and affective commitment: the mediating role of psychological
- [18] Brislin R W: Back-Translation for Cross-Cultural Research. *Journal of Cross-Cultural Psychology*, Vol. 1 (1970) No.3, p.185-216.
- [19] Hellgren J, Sverke M, Isaksson K: A two-dimensional approach to job insecurity: Consequences for employee attitudes and well-being. *European Journal of Work and Organizational Psychology*, Vol. 8 (1999) No.2, p.179-195.
- [20] Tierney P, Farmer S M, Graen G B: An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, Vol. 52 (1999) No.3, p.591-620.
- [21] Ford D P: Knowledge sharing: Seeking to understand intentions and actual sharing. Vol. 10 (2004) No.1, p.536-536
- [22] Baron R M, Kenny D A: The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, Vol. 51 (1986) No.6, p.1173-1182.
- [23] Aiken L S., West S G: Multiple Regression: Testing and Interpreting Interactions. *Journal of the Operational Research Society*, Vol. 45 (1994) No.1, p.119-120.