

# ***High-performance Human Resource and Knowledge Sharing: The Mediating Roles of Organizational Commitment and Organizational Citizenship Behavior***

**Kexin Yi<sup>1,a,\*</sup>**

*<sup>1</sup>King's Business School, King's College London, London, United Kingdom*

*a. kexinsail@outlook.com*

*\*corresponding author*

**Abstract:** Knowledge sharing has been shown to be beneficial for organizational development, but as a private behavior, it is not considered to occur spontaneously. To explore the antecedents of knowledge sharing, this study examines the influence of high-performance human resource on knowledge sharing behavior. To address this problem, the mediating roles of organizational commitment and organizational citizenship behavior and the moderating role of transformational leadership are conducted in the relationship between high-performance human resource and knowledge sharing. Based on 448 survey questionnaires from employees across various industries, the results indicate that high-performance human resource is positively related to knowledge sharing, and organizational commitment and organizational citizenship behavior could take positive mediating effects respectively. In addition, organizational commitment and organizational citizenship behavior sequentially mediate the relationship between high-performance human resource and knowledge sharing. Moreover, transformational leadership strengthens the effects of high-performance human resource on organizational commitment and organizational citizenship behavior, respectively.

**Keywords:** High-performance human resource, knowledge sharing, organizational commitment, organizational citizenship behavior, transformational leadership

## **1. Introduction**

Faced with the global talent shortage crisis, talent recruitment, retention, and training have become a key challenge for global enterprises [1]. Over the past few decades, scholars have come to realize the importance of effective working systems, and a large body of literature is devoted to developing an advanced management model-- high-performance human resource (HPHR) management practice -- to optimize the management of organizations: HPHR has been shown to improve individual performance in organizations in the areas of self-efficacy, creativity, attitude, etc [2-4]. Besides, an organization seeking long-term competitive advantage should attach importance to information exchange among employees, which is a valuable intangible resource [5]. Knowledge sharing (KS) not only helps to integrate different information within and across organizations but also generates new knowledge that is useful to organizations and encourages people to learn and share knowledge [6]. As employees are the carriers and transmitters of knowledge in the enterprise, the human resource

department must pay attention to and manage employees [7]. Therefore, it is worth studying whether HPHR can affect employees' KS behavior.

There has been a lot of interest in studying the effect of HPHR on employees. Most of the early literature involved the analysis of employee performance through HPHR predicting organizational performance, employee attitude, employee motivation, employee turnover [8-11]. When defining HPHR, much early literature regards employee KS behavior as a potential feature of HPHR; some literature regards KS as a mediator or moderator variable when studying the influence of HPHR management on other variables [3,12]. However, these works of literature lack verification and interpretation of the association between HPHR and KS. Meanwhile, previous studies on KS focused on exploring its outcome variables, finding KS had a positive relationship with individual efficiency, innovation, job satisfaction, and organizational performance [13-16]. Nevertheless, it is not natural for employees to share knowledge, because knowledge is often highly private [17]. Therefore, it is important to study the causes of antecedents to KS. Moreover, the antecedent analysis of KS in the past literature remained in the organizational climate and psychological activities [18-19].

In order to make the relationship between HPHR and KS clearer, this study considers the mediating role of two individual-level variables -- OC and OCB and explains the black box in which HPHR affects KS. In addition, the leadership style of organizational leaders also plays an important role in the response of employees, therefore, further attention should be paid to the influence of the atmosphere shaped by the leadership style in the organization on employee behavior. Considering the importance of transformational leadership (TL) in HPHR practice, this study chooses TL as the moderator variable. Therefore, TL was a moderating variable affecting the pathways of HPHR to OC and OCB, respectively in this study. Based on the model, this study aims to provide practical enlightenment for enterprise human resource management from the organizational level.

## 2. Hypothesis

Hypothesis 1: High-performance human resource is positively related to knowledge sharing

Hypothesis 2: OC mediates the relationship between high-performance human resource and knowledge sharing

Hypothesis 3: Organizational citizenship behavior mediates the relationship between high-performance human resource and knowledge sharing.

Hypothesis 4: Organizational commitment and organizational citizenship behavior sequentially mediate the relationship between high-performance human resource and knowledge sharing, such that high-performance human resource is positively related to organizational commitment, organizational commitment is positively related to organizational citizenship behavior, and organizational citizenship behavior is positively related to knowledge sharing.

Hypothesis 5: Transformational leadership strengthens the relationship between high-performance human resource and organizational commitment.

Hypothesis 6: Transformational leadership strengthens the relationship between high-performance human resource and organizational citizenship behavior.

## 3. Methodology

### 3.1. Data collection

Through social networking, a total of 600 questionnaires were sent out and 448 effective questionnaires (average age around 33 years old; 72.5% were males; 61.6% had a bachelor degree or above; mean tenure was 4.5 years) were returned, representing effective response rates of 74.6%.

### 3.2. Measures

Considering the objectives are Chinese, the English scale items are translated into Chinese. All 109 questions from different scales are out of order. The above process can optimize the content validity of the questionnaire. The five-point Likert scale was used for all variables except the controlled variables.

This variable was assessed with an eight dimensions scale [20]. The twenty-seven items in this scale reflect the extent of the company's HPHR. An example item was "Great effort is taken to select the right person".

This variable was assessed with an eight items scale that reflects the extent to the employees' knowledge exchange [21]. An example item was "In daily work, I take the initiative to share my work-related knowledge to my colleagues".

This variable was assessed with a seven dimensions scale [22]. The fifteen items in this scale reflect the extent of the employees' OC. An example item was "I talk up this organization to my friends as a great organization to work for". Cronbach's Alphas of 0.900 (public employees), 0.900 (Classified university employees), 0.880 (hospital employees), 0.88 (bank employees), 0.900 (telephone company employees), 0.840 (scientist and engineers), 0.900 (auto company managers) were obtained in this study.

### 3.3. Model

As shown in Figure 1, a moderated mediation model was designed to examine the impact of HPHR on KS through the mediating roles of OC and OCB, and the moderating role of TL.

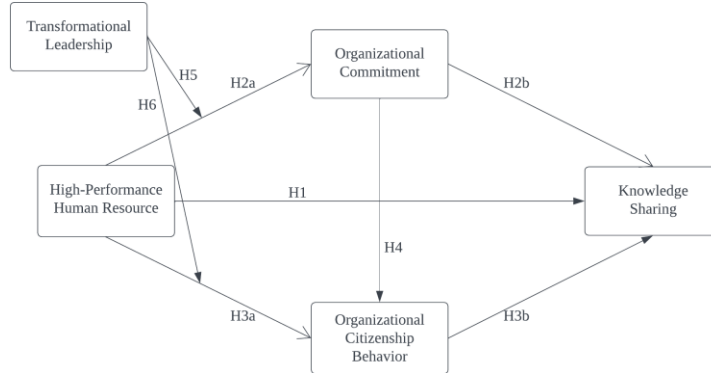


Figure 1: Theoretical Model.

### 3.4. Result

Table 2, Table 3, and Table 4 present the regression results of hypothesis testing.

Table 1: Statistical Information: Means, Standard Deviations, and Correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1.KS	3.796	0.617	1											
2.HPHR	3.888	0.718	0.353**	1										
3.OCB	3.724	0.686	0.379**	0.352**	1									
4.OC	3.562	0.727	0.400**	0.291**	0.329**	1								
5.TL	4.062	0.770	0.017	0.037	0.063	0.072	1							
6.Gender	1.270	0.447	0.110*	0.069	0.162**	0.043	0.035	1						
7.Age	2.270	0.840	0.075	0.040	0.065	0.059	0.031	0.085	1					
8.Edu	2.740	0.824	0.015	0.011	0.087	0.028	-0.005	0.058	-0.018	1				
9.Tenure	4.474	4.290	0.003	-0.041	0.088	0.047	0.034	0.095*	0.526**	-0.027	1			
10.TS	2.730	1.084	0.107*	0.066	0.065	0.001	-0.017	-0.001	0.174**	0.086	0.201**	1		
11.ET	14.570	17.060	0.085	0.066	0.109*	0.015	0.091	0.098*	0.272**	0.087	0.446**	0.170**	1	
12.E2.2.0 N	2.730	1.251	0.048	0.088	0.014	0.008	-0.039	-0.037	-0.041	-0.060	-0.149**	-0.028	-0.207**	1

N=448; \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Hypothesis 1 proposed that HPHR would be positively associated with KS. Results of Model 2 in Table 2 show that HPHR was positively related to KS ( $\beta=0.330$ ,  $SE=0.052$ ,  $p<0.001$ ), supporting Hypothesis 1.

Hypothesis 2a proposed that HPHR would be positively associated with OC. Results of Model 3 in Table 2 show that HPHR was positively related to OC ( $\beta=0.298$ ,  $SE=0.054$ ,  $p<0.001$ ), supporting Hypothesis 2a. Hypothesis 2b proposed that OC would be positively associated with KS. Results of Model 4 in Table 2 show that OC was positively related to KS ( $\beta=0.329$ ,  $SE=0.043$ ,  $p<0.001$ ), supporting Hypothesis 2b. Hypothesis 3a proposed that HPHR would be positively associated with OCB. Results of Model 5 in Table 2 show that HPHR was positively related to OCB ( $\beta=0.342$ ,  $SE=0.049$ ,  $p<0.001$ ), supporting Hypothesis 3a. Hypothesis 3b proposed that OCB would be positively associated with KS. Results of Model 6 in Table 2 show that OCB was positively related to KS ( $\beta=0.285$ ,  $SE=0.048$ ,  $p<0.001$ ), supporting Hypothesis 3b.

Table 2: Regression Results for Mediating Effects

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
	KS	KS	OC	KS	OCB	KS	OCB	KS
Gender	0.106* (0.076)	0.084 (0.072)	0.016 (0.075)	0.079 (0.068)	0.124** (0.068)	0.048 (0.070)	0.136* (0.068)	0.053 (0.067)
Age	0.079 (0.047)	0.057 (0.045)	0.028 (0.047)	0.048 (0.042)	-0.013 (0.042)	0.061 (0.043)	-0.005 (0.043)	0.052 (0.041)
Edu	-0.006 (0.041)	-0.005 (0.039)	0.032 (0.041)	-0.015 (0.037)	0.075 (0.037)	-0.026 (0.038)	0.063 (0.037)	-0.029 (0.036)
Tenure	-0.102 (0.010)	-0.059 (0.010)	0.068 (0.010)	-0.081 (0.009)	0.083 (0.009)	-0.083 (0.009)	0.029 (0.009)	-0.095 (0.009)
TS	0.099* (0.032)	0.078 (0.030)	-0.033 (0.032)	0.089* (0.029)	0.016 (0.029)	0.073 (0.029)	0.043 (0.029)	0.084* (0.028)
ET	0.095 (0.002)	0.059 (0.002)	-0.045 (0.002)	0.074 (0.002)	0.034 (0.002)	0.050 (0.002)	0.075 (0.002)	0.065 (0.002)
EN	0.062 (0.028)	0.030 (0.026)	-0.015 (0.027)	0.035 (0.025)	0.012 (0.025)	0.026 (0.025)	0.041 (0.025)	0.031 (0.024)

Table 2: (continued)

HPHR	0.330*** (.052)	0.298*** (0.054)	0.233*** (0.051)	0.342*** (0.049)	0.233*** (0.053)	0.175*** (0.052)
OCB					0.285*** (0.048)	0.212*** (0.048)
OC			0.329*** (0.043)			0.319*** (0.042)
R2	0.039	0.145	0.092	0.243	0.158	0.213
Adjusted-R2	0.024	0.129	0.076	0.227	0.143	0.197
F	2.551	9.278	5.580	15.597	10.321	37.913
						9.415
						39.685

N=448; \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Hypothesis 4 proposed that OC and OCB sequentially mediate the relationship between HPHR and KS. Results of Model 7 in Table 2 show that OC was positively related to OCB ( $\beta=0.319$ ,  $SE=0.042$ ,  $p<0.001$ ). The bootstrapping test of indirect effect was used to test the mediation effects [23]. Using PROCESS Procedure for SPSS Version 4.1, the test generates 5,000 samples. In 95% confidence intervals, If they do not contain zero for indirect effects, the results are significant at  $\alpha=0.05$ . As shown in Table 3, the direct effect was 0.228 with  $CI=[0.127, 0.330]$ . The indirect effect of HPHR on KS through OC was positive and significant ( $\beta=0.091$ ,  $SE=0.030$ , 95%  $CI=[0.042, 0.157]$ ); the indirect effect of HPHR on KS through OCB was positive and significant ( $\beta=0.072$ ,  $SE=0.029$ , 95%  $CI=[0.025, 0.137]$ ); the indirect effect of HPHR on KS through OC and OCB was positive and significant ( $\beta=0.019$ ,  $SE=0.008$ , 95%  $CI=[0.006, 0.037]$ ). Therefore, Hypothesis 4 was supported.

Table 3: Bootstrapping Results of High-Performance Human Resource on Knowledge Sharing Through Organizational Commitment and Organizational Citizenship Behavior

	Effect	SE	CI
Direct Effect	0.228	0.051	[0.127, 0.330]
Total Indirect Effect	0.018	0.040	[0.113, 0.269]
HPHR→OC→KS	0.091	0.030	[0.042, 0.157]
HPHR→OCB→KS	0.072	0.029	[0.025, 0.137]
HPHR→OC→OCB→KS	0.019	0.008	[0.006, 0.037]

Hypothesis 5 proposed that TL would moderate the effect of HPHR on OC. The results of Model 1 in Table 4 show that the interaction effect was positive and significant ( $\beta=0.153$ ,  $SE=0.063$ ,  $p=0.001$ ), supporting Hypothesis 5. Hypothesis 6 proposed that TL would moderate the effect of HPHR on OCB. The results of Model 2 in Table 4 show that the interaction effect was positive and significant ( $\beta=0.121$ ,  $SE=0.057$ ,  $p=0.006$ ), supporting Hypothesis H6.

Table 4: Regression Results for Moderating Effect of Transformational Leadership

Variables	Model 1	Model 2
	OC	OCB
Gender	0.013 (0.074)	0.122 (0.068)
Age	0.028 (0.046)	-0.013 (0.042)
Edu	0.026 (0.040)	0.070 (0.037)
Tenure	0.075 (0.010)	0.088 (0.009)
TS	-0.037 (0.031)	0.013 (0.028)
ET	-0.053 (0.002)	0.027 (0.002)
EN	-0.002 (0.027)	0.022 (0.025)
HPHR	0.283*** (0.054)	0.331*** (0.049)
TL	0.070 (0.043)	0.049 (0.039)
HPHRTL	0.152*** (0.063)	0.121** (0.057)
R2	0.119	0.174
Adjusted R2	0.099	0.155
F	5.885	9.222

N=448; \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

The interaction plots were graphed to show the moderating effects of TL. As shown in Figure 2A, the result indicated that HPHR was positively and significantly associated to OC (gradient of slope=0.326, t=6.037, p=0.000) when the TL was low. Simultaneously, the association was positive and significant (gradient of slope=.537, t=7.779, p=0.000). In addition, at high TL the effect of HPHR on OC was stronger than at low TL. As shown in Figure 2B, the result indicated that HPHR was positively and significantly associated to OCB (gradient of slope=0.362, t=7.240, p=0.000) when the TL was low. Simultaneously, the association was positive and significant (gradient of slope=0.520, t=8.200, p=0.000). In addition, at high TL the effect of HPHR on OCB was stronger than at low TL.

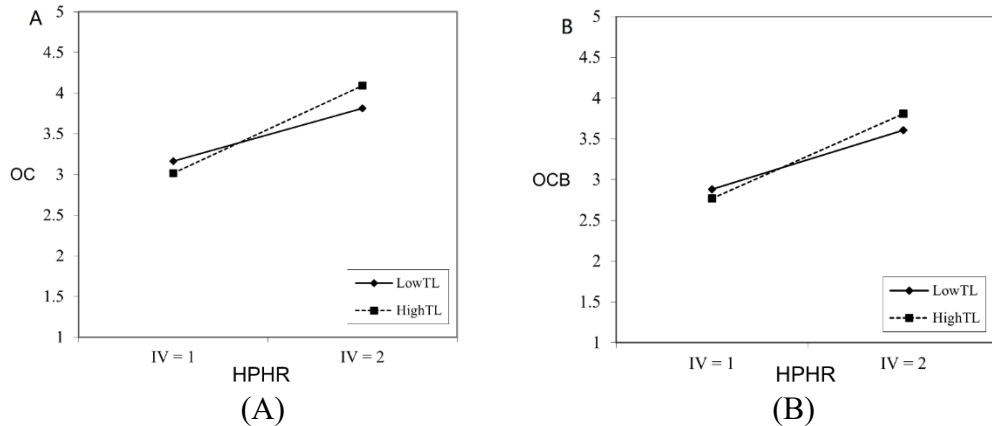


Figure 2: The Interaction of High-Performance Human Resource (HPHR) and Transformational Leadership on (A) Organizational Commitment and (B) Organizational Citizenship Behavior.

Overall, as mentioned above, Hypothesis 1, Hypothesis 2, Hypothesis 3, Hypothesis 4, Hypothesis 5, and Hypothesis 6 are supported.

#### 4. Implication

The results indicate that HPHR is significantly positively related to KS, and OC and OCB take significant positive mediating roles, respectively. In addition, the positive serial mediating effect from OC to OCB is examined to be significant. Moreover, this study found that TL significantly strengthens the effects of HPHR on OC and on OCB, respectively.

##### 4.1. Theoretical implication

The high job satisfaction and sense of belonging of employees under HPHR management further enhance individuals' altruistic thinking and collective pride, making them more likely to share their valuable personal or private knowledge with the organization. This study demonstrates the significant and positive indirect effect of HPHR on KS through OCB. Moreover, the employee's dependence on the organization inherent in OC partly motivates employees to make extra efforts to compete for a long-term position within the organization. Therefore, as a typical discretionary behavior, OCB is likely to be influenced by OC.

Furthermore, this study examines the effects of HPHR on OC and OCB in the context of TL, respectively. Managers who possess TL characteristics are likely to stimulate employees' emotional and discretionary behavior towards the organization by granting them autonomy and care. Therefore, under high TL levels, the effects of HPHR on OC and OCB may be enhanced. This study demonstrates that TL significantly and positively moderates the effects of HPHR on OC. Meanwhile, TL's positive moderating effect on the effects of HPHR on OCB is also significant.

##### 4.2. Managerial Implications

Knowledge is an invaluable intangible asset for organizations. Effective information acquisition and dissemination between individuals bring a diverse range of information to the organization, strengthening relationships among members and playing a pivotal role in organizational management and development. However, some organizations may face challenges with individuals' reluctance to share knowledge due to the personal nature of knowledge and potential risks associated with sharing. As a result, organizations ought to actively encourage KS as employees may not engage in this

behavior otherwise. As a result, this study recommends that organizations enhance their human resource management systems by implementing measures such as arranging regular training, designing promotion systems, and providing employees with opportunities to express themselves and make decisions, which are conducive to improving employee skills and unleashing their potential. When employees perceive the organization's contributions, they are more likely to voluntarily engage in behaviors that benefit the organization and hence more willing to share personal knowledge.

Meanwhile, organizations should also place importance on cultivating an emotional connection with their employees, as employee commitment can similarly prompt them to consider the organization's welfare. It is worth noting that although reasonable reward and punishment systems have been found to motivate employees to contribute knowledge, organizations should not attempt to rely on material incentives to compel KS, which is difficult to evaluate and record. Instead, organizations should establish a culture of teamwork and altruism, expecting employees to voluntarily engage in behaviors that benefit the organization beyond contractual obligations. Additionally, upper-level leaders play a significant role in influencing the organization's management system. This study recommends that leaders consciously cultivate their TL styles to enhance the role of HPHR. This requires leaders to avoid using personal authority to command or oppress subordinates, but rather to utilize their personal charisma to establish an atmosphere of mutual respect and trust.

## 5. Conclusion

Despite the contributions of this study, there are some potential limitations that need to be acknowledged. Due to the subjective judgements that may exist among the research subjects in evaluating themselves and their leaders, the experimental results of this study may be affected. Some employees may cover up their own behavior and the organization's management style, or maliciously slander the leaders or organizations, thereby collecting non-authentic data and causing errors in the research results. Therefore, this study recommends that future surveys increase sample size and coverage areas to reduce the resulting caused by subjective responses and cultural differences.

## References

- [1] Schuler, R.S., Jackson, S.E., and Tarique, I. (2011). *Global talent management and global talent challenges: Strategic opportunities for IHRM*. *Journal of world business* 46(4), 506-516.
- [2] Jyoti, J., and Dev, M. (2016). *Perceived high-performance work system and employee performance: Role of self-efficacy and learning orientation*. *Metamorphosis* 15(2), 115-133.
- [3] Ma, Z., Long, L., Zhang, Y., Zhang, J., and Lam, C.K. (2017). *Why do high-performance human resource practices matter for team creativity? The mediating role of collective efficacy and knowledge sharing*. *Asia Pacific Journal of Management* 34, 565-586.
- [4] Snape, E., and Redman, T. (2010). *HRM practices, organizational citizenship behaviour, and performance: A multi-level analysis*. *Journal of management studies* 47(7), 1219-1247.
- [5] Birkinshaw, J., and Sheehan, T. (2002). *Managing the knowledge life cycle*. *MIT Sloan management review*.
- [6] Pinho, I., Rego, A., and Pina e Cunha, M. (2012). *Improving knowledge management processes: a hybrid positive approach*. *Journal of knowledge management* 16(2), 215-242.
- [7] Chen, C.-J., and Huang, J.-W. (2009). *Strategic human resource practices and innovation performance—The mediating role of knowledge management capacity*. *Journal of business research* 62(1), 104-114.
- [8] Delery, J.E., and Doty, D.H. (1996). *Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions*. *Academy of management Journal* 39(4), 802-835.
- [9] Kehoe, R.R., and Wright, P.M. (2013). *The impact of high-performance human resource practices on employees' attitudes and behaviors*. *Journal of management* 39(2), 366-391.
- [10] Kontoghiorghes, C. (2016). *Linking high performance organizational culture and talent management: satisfaction/motivation and organizational commitment as mediators*. *The International Journal of Human Resource Management* 27(16), 1833-1853.



- [11] Luna-Arocas, R., and Camps, J. (2007). *A model of high performance work practices and turnover intentions. Personnel review* 37(1), 26-46.
- [12] Fu, N., Flood, P.C., Bosak, J., Rousseau, D.M., Morris, T., and O'Regan, P. (2017). *High-Performance work systems in professional service firms: Examining the practices-resources-uses-performance linkage. Human Resource Management* 56(2), 329-352.
- [13] Masa'deh, R.e., Obeidat, B.Y., and Tarhini, A. (2016). *A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance, and firm performance: A structural equation modelling approach. Journal of management development* 35(5), 681-705.
- [14] Radaelli, G., Lettieri, E., Mura, M., and Spiller, N. (2014). *Knowledge sharing and innovative work behaviour in healthcare: A micro-level investigation of direct and indirect effects. Creativity and Innovation Management* 23(4), 400-414.
- [15] Zhu, Y.Q. (2017). *Why and how knowledge sharing matters for R&D engineers. R&D Management* 47(2), 212-222.
- [16] Song, C., Park, K.R., and Kang, S.-W. (2015). *Servant leadership and team performance: The mediating role of knowledge-sharing climate. Social Behavior and Personality: an international journal* 43(10), 1749-1760.
- [17] Kogut, B., and Zander, U. (1992). *Knowledge of the firm, combinative capabilities, and the replication of technology. Organization science* 3(3), 383-397.
- [18] Collins, C.J., and Smith, K.G. (2006). *Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. Academy of management journal* 49(3), 544-560.
- [19] Arthur, J.B., and Huntley, C.L. (2005). *Ramping up the organizational learning curve: Assessing the impact of deliberate learning on organizational performance under gainsharing. Academy of Management Journal* 48(6), 1159-1170.
- [20] Organ, D.W. (1990). *The motivational basis of organizational citizenship behavior. Research in organizational behavior* 12(1), 43-72.
- [21] George, J.M., and Bettenhausen, K. (1990). *Understanding prosocial behavior, sales performance, and turnover: A group-level analysis in a service context. Journal of applied psychology* 75(6), 698.
- [22] Alavi, M., and Leidner, D.E. (2001). *Knowledge management and knowledge management systems: Conceptual foundations and research issues. MIS quarterly*, 107-136.
- [23] Preacher, K., Rucker, D., and Hayes, A. (2007). *"Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. multivariate Behavioral research*, 42 (1), 185-227.