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FOSTERING MANAGERS' KNOWLEDGE-SHARING BEHAVIOR: THE IMPACT OF THE EMPLOYEE–ORGANIZATION RELATIONSHIP

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Fostering managers' knowledge sharing is very important in the utilization and leverage of organizational knowledge. In this study, we used social cognitive reinforcement theory, which is derived from social learning theory, to examine how the employee–organization relationship (EOR) influences managers' knowledge-sharing behavior. We surveyed 550 frontline managers from 19 Chinese companies regarding the 2 components of EOR (expected contributions and offered inducements) and knowledge sharing. The results showed that expected contributions positively influenced knowledge sharing, and that offered inducements reinforced the relationship between the employee and the organization. Thus, compared to other approaches, a mutual investment approach, in which employers expect high levels of employee contributions and offer extensive inducements, will foster a higher level of knowledge sharing. Implications for future research are discussed.

Keywords: employment relations, employee–organization relationship, offered inducement, expected contribution, knowledge sharing.

Utilization and leverage of organizational knowledge and intellectual capital have become a main source of competitive advantage (Wang, Noe, & Wang, 2014). Management practitioners and academic researchers are interested in studying how to promote knowledge sharing effectively, especially among front-line managers, who have a rich repository of organizational knowledge

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that can be leveraged to improve team performance (Carmeli, Gelbard, & Reiter-Palmon, 2013). It is also important to understand which human resource strategies will best foster managers' knowledge-sharing behavior; thus, in this study we examined managers' leverage and utilization of knowledge in their enterprise.

In recent years, organizations have adopted flexible employment practices, such as contingent work and outsourcing, in order to deal with a fast-changing environment and sustain competitive advantage (Jia, Shaw, Tsui, & Park, 2014; Zhang, Song, Tsui, & Fu, 2014). Individuals regard knowledge as an intangible asset that may bring forth opportunities, promotions, and other benefits at present and in the future (Jarvenpaa & Staples, 2001). Previous researchers in this field have mostly discussed issues relating to employment relations, such as the recruitment and selection process before employment, and incentives to encourage knowledge sharing (Fong, Ooi, Tan, Lee, & Chong, 2011). However, findings regarding the function of rewards in knowledge sharing have been inconsistent. In some studies, it has been found that rewards are a useful instrument to promote knowledge sharing (Bartol & Srivastava, 2002), whereas in others evidence that material rewards are insufficient to promote knowledge sharing has been presented (Bock, Zmud, Kim, & Lee, 2005; Jarvenpaa & Staples, 2001). Thus, in this study we used the employee–organization relationship (EOR) framework to conduct a deeper exploration of how employment relations influence knowledge-sharing behavior.

Literature Review and Hypotheses Development

Tsui, Pearce, Porter, and Tripoli (1997) constructed a two-factor EOR framework to analyze employment relations, comprising *contributions that employees make*, i.e., in-role duties and extrarole duties, and *inducements offered to employees*, which include material rewards, such as salaries, bonuses, and allowances, and developmental rewards, such as career development, training, and empowerment (Jia et al., 2014; Wang, Tsui, Zhang, & Ma, 2003). The EOR is classified according to whether the expected contributions and offered inducements are narrow and specified, or broad and open-ended (Tsui et al., 1997). *Mutual investment* refers to an EOR in which both the employee's duties and the offered inducements are broad and open-ended. In contrast, in a *quasispot* contract EOR only the basic duties of the employee, low rewards, and a purely economic exchange are emphasized. These two approaches represent a balanced EOR between the two parties. *Underinvestment* refers to an EOR of broad expected contributions from the employee and low inducements. *Overinvestment* refers to an EOR of narrow expected contributions from the employee and high inducements. The latter two approaches represent an unbalanced EOR.

According to social learning theory, through their social environment individuals learn to behave in expected and appropriate ways (Grusec, 1992). Organizations may reinforce managers' behavior through two processes: a) setting up appropriate behavior by instruction or example (cognitive process), and b) reinforcing the cognitive process by providing extrinsic inducements such as rewards or feedback. Expected contributions influence employee behavior, through the cognitive process, and inducements offered reinforce the process (Zhang et al., 2014). In this study, *knowledge sharing* refers to managers' knowledge-sharing behavior with colleagues and subordinates. In-role and extrarole expected contributions shape managers' roles in the organization. In role theory, it is suggested that individuals have an inner need to fulfill others' expectations (Joshi & Fast, 2013). When employers require managers to make a broad, high-level contribution, managers must ensure that daily tasks are finished to a high quality while also improving the performance of their team through adopting new technology, optimizing processes, and overcoming challenges (Shaw, Dineen, Fang, & Vellella, 2009). Sharing knowledge within the team may contribute to better performance among team members. In order to fulfill the requirements of the employer, managers are responsible for improving team members' efficiency and cooperation, and sharing knowledge is indispensable in this process. Hence, the greater the contribution managers are expected to make, the more important knowledge sharing becomes. Thus, we formed the following hypothesis:

Hypothesis 1: Managers' expected contributions will be positively related to knowledge sharing in an organization.

Organizations offer various inducements, ranging from narrow material rewards to broad rewards that include both material and developmental aspects. When the offered inducements are broad, managers have a greater motivation to fulfill job requirements in terms of both in-role and extrarole duties (Tsui et al., 1997). That is, offered inducements enhance the relationship between expected contributions and knowledge sharing. It is inferred that the willingness to share knowledge differs according to the type of EOR. In a mutual investment relationship, expected contributions help managers to recognize their responsibilities and the necessity of sharing knowledge, and high inducements give positive reinforcement to carry out those responsibilities. The use of a mutual investment approach also shows that the employer wants to maintain a long-term relationship with the manager. In return, managers are more likely to share knowledge when these long-term relationships are successful. In a quasispot contract relationship, managers are required to make narrow contributions and are offered limited and purely material rewards. In this context, managers may finish tasks without sharing knowledge, and personal benefits are low. As a

result, managers perceive that they are not valued members of the team, which perpetuates the cycle of not sharing knowledge. In the underinvestment approach, inducements are insufficient to motivate managers to meet requirements. In the overinvestment approach, expected contributions are too narrow to activate managers' sense of responsibility regarding sharing knowledge. Thus, we formed the following hypothesis:

Hypothesis 2: The relationship between managers' expected contributions and knowledge sharing will be positive and significant when offered inducements are high, but the relationship will be attenuated when offered inducements are low. That is, the level of knowledge sharing will be highest when the mutual investment approach is used by the employer, and lowest in a quasispot contract relationship.

Method

Sample and Procedure

We recruited middle managers from 19 high-technology companies in China that emphasize knowledge sharing as the means to maintain and sustain organizational development. In order to increase the response rate and quality of responses, we first obtained consent from top executives at the target companies. We distributed a survey pack to participants that included an envelope and a letter from their human resource managers and our own research team to solicit participation, with assurance given that individual responses would be kept confidential. Participants completed the survey during working hours, placed the form in the envelope provided, sealed it, and directly sent the finished survey to the researchers.

We sent out 660 survey forms and collected 561 (response rate = 85%), 11 of which were discarded because they were unfinished. The sample included 63% men and 37% women, and ages ranged from 17 to 64 years (M = 29.67, SD = 5.24). In terms of level of education, 13% of the participants had a high school-level education or less, 81% had a college degree, and 6% had a master's degree or higher academic qualification. Participants had been employed by their companies for an average of 3.97 years (SD = 2.20).

Measures

We used a measure of EOR developed in China by Jia et al. (2014), which comprises 14 items to measure expected contributions and 13 items to measure offered inducements. The item stem for expected contributions is "To what extent does your firm emphasize each of the following contributions among the employees in this team?" Example contributions include fulfilling the job

requirements, and meeting performance goals, each of which is rated on a 7-point scale ranging from 0 = *none* to 6 = *strongly emphasize*. The item stem for offered inducements is "To what extent does your firm provide each of the following inducements to the employees in this team?" Offered inducements include material rewards, like providing competitive salaries, and developmental rewards, like valuing employees' feedback on the company's overall policies. Responses are also rated on a 7-point scale ranging from 0 = *none* to 6 = *always provides*.

Knowledge sharing was measured by the managers' self-rating of their knowledge-sharing behavior on an eight-item scale developed by Lu, Leung, and Koch (2006). After the removal of one item with a negative tone, the scale's reliability increased; therefore, we used a seven-item version of the scale in this study. A sample item is "In daily work, I take the initiative to share my work-related knowledge with my colleagues." Level of education, gender, and length of tenure in the present organization were used as control variables because previous researchers have suggested that managers may exhibit differences in knowledge-sharing behavior according to their level of education, gender, and tenure (Lu et al., 2006). Gender was coded as 1 = male and 2 = female. Level of education was classified as high school or less, 3-year college education, 4-year university education, and postgraduate qualification. Tenure was measured by the number of years the employee had worked for the present organization.

Common Method Variance and Confirmatory Factor Analyses

Because data for all four variables were collected from the same respondents, common method variance could have influenced the results; thus, we used Harman's single-factor test to address this (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Exploratory factor analysis showed that the first factor explained 32% of the total variance. As this did not exceed 50%, common method variance was not a pervasive issue in this study.

We conducted confirmatory factor analyses in order to examine the self-reported measures. Following the method used in previous research (Lu et al., 2006), we tested the measurement model by comparing the fit of the single-factor model to that of a three-factor model (number of scales). Results showed that the three-factor model fitted the data well (chi square/degrees of freedom = 2.231, comparative fit index = .954, standardized root mean square residual = .047, root mean square error of approximation = .047). Indicators all significantly loaded on their respective latent factors; therefore, we determined that the measures captured distinctive constructs.

Results

Descriptive statistics are reported in Table 1. Knowledge sharing was found to be positively related to offered inducements and expected contributions. In order to test the hypotheses, regression analysis was conducted and the results are shown in Table 2. As the regression results show, in Model 1 expected contributions were significantly related to knowledge sharing and, therefore, Hypothesis 1 was supported. In Model 2, the product of offered inducements × expected contributions was significantly related to knowledge sharing, supporting Hypothesis 2.

Table 1. *Means and Standard Deviations of, and Correlations Among Study Variables*

	M	*SD*	1	2	3	4	5	Cronbach's α
1. Gender	1.39	0.49						
2. Level of education	2.48	0.82	.049					
3. Tenure	3.98	2.16	-.032	-.027				
4. Offered inducements	3.43	0.77	-.054	-.030	-.059			.931
5. Expected contributions	4.23	0.61	.011	-.036	-.006	.422*		.933
6. Knowledge sharing	4.26	0.56	.022	.060	.027	.244*	.279*	.926

Note. * $p < .01$ (two-tailed).

Table 2. *Results of Path Analysis*

Variables	Knowledge sharing	
	Model 1	Model 2
Gender	.032	.023
Level of education	.067	.069
Tenure	.041	.025
OI	.170*	.164*
EC	.195*	.298*
OI × EC		.235*
Adj. R^2	.091*	.135*
ΔR^2		.044

Note. OI = offered inducements, EC = expected contributions. * $p < .01$.

Discussion

In this study, we identified how the different functions of two EOR elements—expected contributions and offered inducements—promote managers' knowledge-sharing behavior. Further, in response to a call in the knowledge-sharing literature for an extended theoretical perspective (Wang & Noe, 2010), we

used the theory of cognitive reinforcement, as proposed in social learning theory, to explain how knowledge-sharing behavior is encouraged in organizations. We found that expected contributions were positively related to knowledge sharing and that offered inducements moderated the relationship between expected contributions and knowledge sharing. In previous research, results on the relationship between rewards and knowledge-sharing behavior have been inconsistent (Bartol & Srivastava, 2002; Bock et al., 2005). We argue that offered inducements are reinforcement elements, wherein expected contributions shape the role of managers and offered inducements reinforce the relationship between expected contributions and knowledge sharing. In this study, we found that the mutual investment approach was best for fostering knowledge sharing compared with the other approaches. One reason for this may be that when the mutual investment approach is used, a long-term EOR is established (Tsui et al., 1997). This result is consistent with that of Currie and Kerrin (2003), who concluded that the existence of a long-term EOR is likely to foster knowledge sharing.

Our findings have several theoretical implications. First, we have added to the EOR literature by extending the outcomes of the EOR to knowledge sharing. Our empirical test results show that, from among the four EOR types, the mutual investment relationship fosters the highest level of knowledge sharing. This is consistent with the substantial body of EOR research showing positive outcomes from the mutual investment approach on employees' behavior (Hom et al., 2009; Shaw et al., 2009; Shore, Bommer, Rao, & Seo, 2009). Second, we have added to the knowledge-sharing literature by going beyond the theory of reasoned action, social exchange theory, and the social network/capital perspective (Caimo & Lomi, 2015; Wang & Noe, 2010) to use social cognitive theory as a lens to analyze how managers in organizations foster employees' knowledge-sharing behavior.

The first of the limitations in our study is that all data were collected at one time point. A more reliable causal relationship between the tested variables should be explored using longitudinal research. Second, we tested the relationship between the EOR and the sole variable of managers' knowledge sharing. Future researchers may inspect additional individual psychological mechanisms, for example, mediation of trust (Wu, Lin, Hsu, & Yeh, 2009). There may also be other organizational factors that influence the effect of the EOR on managers' knowledge sharing, e.g., the social network of organizations (Jia et al., 2014). Third, the EOR framework is very important in understanding employment relations, and we revealed that the EOR is related to proactive behavior. However, more research is needed to examine the influence of the EOR on organizational behavior, especially negative behavior.

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