

5-2018

Interrelationship among Job Characteristic, Knowledge Sharing, and Job Satisfaction in a Cultural Organization: A Social Network Perspective

Sunghan RYu

Shanghai Jiao Tong University, shryu@sjtu.edu.cn

Follow this and additional works at: <http://aisel.aisnet.org/confirm2018>

Recommended Citation

RYu, Sunghan, "Interrelationship among Job Characteristic, Knowledge Sharing, and Job Satisfaction in a Cultural Organization: A Social Network Perspective" (2018). *CONF-IRM 2018 Proceedings*. 19.
<http://aisel.aisnet.org/confirm2018/19>

This material is brought to you by the International Conference on Information Resources Management (CONF-IRM) at AIS Electronic Library (AISeL). It has been accepted for inclusion in CONF-IRM 2018 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

INTERRELATIONSHIP AMONG JOB CHARACTERISTIC, KNOWLEDGE SHARING, AND JOB SATISFACTION IN A CULTURAL ORGANIZATION: A SOCIAL NETWORK PERSPECTIVE

Sunghan Ryu
Shanghai Jiao Tong University
shryu@sjtu.edu.cn

Abstract

This study aims to examine the relationships among job characteristics, knowledge sharing, and job satisfaction, leveraging a social network analysis approach. We conducted social network survey and job-related survey with 50 employees of a cultural organization in South Korea. The results of analysis found several important relationships. First, an employee's job routineness is negatively associated with her network centrality and knowledge sharing. Second, job specificity is positively related to knowledge sharing, but not to job satisfaction. Finally, knowledge sharing is positively associated with job satisfaction while job feedback has a marginal effect on job satisfaction.

Keywords: Knowledge sharing, social network analysis, job satisfaction, job characteristic

1. Introduction

Organizations are required to develop not only tangible resources, but also intangible resources such as knowledge. It is well established that promoting knowledge sharing between employees improves firm performance in different levels (Bock et al. 2005, Hooff and Ridder 2000, Kanawattanachai and Yoo 2007, Wasko and Faraj 2005). While the necessity of knowledge sharing in the public sector is remarkable as same as in the business sector, however, related studies have been neglected. As public organizations are considerably different from private organizations, researchers are required to consider the characteristics of public organizations, such as their different job characteristics.

Regarding this different job characteristics, our study aims to understand antecedent and consequence of knowledge sharing in the public sector based on social network analysis. Social network analysis is suitable for the study as it has some advantages (Panzarasa et al. 2009). For example, it is easy to figure out communications between members in organization by visualizing real social network. The study validates the relationship among different job characteristics, network centrality, knowledge sharing, and job satisfaction.

For the study, we closely collaborated with a major cultural organization in South Korea. The target organization is very appropriate for the study because it consists of different teams with diverse functions. With the surveys of 50 employees, the results of analysis show job routineness has a negative effect on an employee's knowledge sharing and network centrality. Job specificity has a positive effect on knowledge sharing, but not on job satisfaction. Finally, knowledge sharing is positively associated with job satisfaction while job feedback has a marginal impact on job satisfaction.

2. Theoretical Background and Hypotheses Development

2.1. Job characteristic and knowledge sharing

As job satisfaction is a key factor resulting in positive outcomes, such as longer tenure and higher job performance, previous studies found a strand of factors affecting job satisfaction. For example, Wright and Davis (2003) define three job characteristic, including job routines, job feedback, job specificity, and suggest that job feedback is positively related to job satisfaction whereas job routines is negatively associated with job satisfaction.

From a different perspective, a few pioneering studies examined the effect of job characteristics on knowledge sharing. For example, Byström and Järvelin (1995) verified that high level of task complexity led active knowledge sharing. Bock et al. (2005) found different job characteristics can be motivators for knowledge sharing. We assume that the job with clearer specificity, more feedback, and less routineness will encourage more knowledge sharing.

Hypothesis 1: An employee's job specificity will be positively associated with her knowledge sharing.

Hypothesis 2: An employee's job feedback will be positively associated with her knowledge sharing.

Hypothesis 3: An employee's job routineness will be positively associated with her knowledge sharing.

2.2. Job characteristic and network centrality

Job characteristic is a predictor of network structural position (Brass 1981). An employee who is in critical structural position in networks may have common factors related to their jobs. Brass (1981) argued that there are significant relationships between three relational measures, i.e., centrality, criticality, transaction alternatives availability, and job characteristics. We assume that a less routine job will lead more critical network structural position of an employee.

Hypothesis 4: An employee's job feedback will be positively associated with her knowledge sharing.

2.3. Network position, knowledge sharing, and job satisfaction

According to Mehra et al. (2001), people in central network position have better performance. Employee's network position affects their turnover (Feeley et al. 2008). These results indicate that people in central position have more chance to access information, social support. In other words, structural position in networks such as friendship, peer network, and knowledge sharing network affect job satisfaction by giving benefit to people who has more centrality measure. Based on the results of previous literature, we propose that an employee who locates at a central position in social networks perceives high level of job satisfaction and involves more knowledge sharing.

Hypothesis 5: An employee's network centrality will be positively associated with her knowledge sharing.

Hypothesis 6: An employee's network centrality will be positively associated with her Job satisfaction.

2.4. Knowledge sharing and Job Satisfaction

Based on the previous study verified people share their knowledge for the intrinsic motivations such as happiness form helping others (Teigland and Wasko 2009, Wasko and Faraj 2005), we hypothesize that an employee who involves in high level of knowledge sharing has higher level of job satisfaction.

Hypothesis 7: An employee's knowledge sharing will be positively associated with her job satisfaction.

3. Method

3.1. Data and sample

For the study, we closely collaborated with a major cultural organization in the public sectors of South Korea. The target organization is suitable for the study because it consists of different functions and thus diverse job characteristics. For example, a planning staff performs a more specific and less routine job than a supporting staff. Two steps of surveys were conducted: social network survey and job related survey. For the online survey, we used Qualtrics which is one of the most widely-used online survey tools. For the network analysis, NodeXL was used. 62 employees (of 82 in 9 teams) participated in the network survey. Among 62 employees, 50 employees joined the job related survey. Among 50 participants, 27 (54%) are male and 23 (46%) are female. Average work year is 5.4 years.

3.2. Measurement

For measuring the network structure variables, we asked participants to answer two stages of questionnaires. In the first stage, they check whether members in the same team give them job related information or knowledge in last six months or not. After that, they are inquired to name maximum 7 companions in other teams who gave them job related information or knowledge in last six months. Based on the result of the survey, researchers draw the network map of 62 employees who join the network survey and measured each employee's degree centrality (DEGREE). For the job related variables such as job satisfaction, researchers adopted previous research's measurement. We adopted the measurements of Wright & Davis (2013) for job satisfaction and three job characteristics, i.e., job specificity, job feedback, and job routineness. We used measurement items of Hooff & Ridder (2000) for knowledge sharing. Table 1 shows the details of measurement items for the study.

4. Result

4.1. Network Analysis

Density of the network is 0.08, and average geodesic distance is around 3. In the case of number of degree, range are from 1 to 17, and frequency is exponentially decay by increasing of number of degree. The shape of network map indicates networks in organization follows the common shape of networks which are denser in the center and sparser in the peripheral.

5.2. Reliability and Validity Analysis

Table 2 presents the descriptive statistics and the result of reliability test. Reliability test was performed on the 26 items for the 4 variables. Cronbach's alpha is used for testing the reliability of the instrument and higher cut off value of 0.6 is adopted. All variables have higher Cronbach's alpha values than cut off value, 0.6 ranging from 0.658 to 0.955. For checking the validity of variables, researchers calculated the each item's correlation coefficient value with average value of items for each construct (for convergent validity) and executed single factor analysis (for discriminant validity). Through the process, 2 items were deleted for lower value comparing to others. Finally, factor analysis is used to check validity firmly. Since all variables were measured by multi-item, factor analysis with varimax was adopted to check the unidimensionality among items. Items with lower factor loading values than 0.5 were deleted. There were 1 item having factor loading values lower than 0.5, hence 25 items are used for regression analysis.

Measure	Acronym	Number of items	Source	Representative item
Job Satisfaction	JOBSA	4	Wright & Davis (2003)	I am very satisfied with the kind of work that I do.
Job Specificity	JOBSP	4	Wright & Davis (2003)	My responsibilities at work are very clear and specific.
Job Feedback	JOBFB	4	Wright & Davis (2003)	My last performance evaluation assisted me in improving my work.
Job Routineness	JOBRT	4	Wright & Davis (2003)	My daily work routine is very predictable.
Knowledge Sharing	KNOSH	10	Hooff & Ridder (2000)	I share information I have with companions in my team.

Table 1: Measurement of variables

4.3. Result of Regression Analysis

A multiple regression analysis was used for examining the relationship of variables. Totally 3 models were run for each dependent variables, i.e., job satisfaction, knowledge sharing, network centrality, respectively.

Table 2 shows the results of regression analysis. In column 1, the results indicate that knowledge sharing is positively related to job specificity while negatively associated with job routineness, which supports Hypothesis 1 and Hypothesis 3, respectively. However, Hypothesis 2, proposing the positive relationship between job feedback and knowledge shantung, is not supported. In column 2, job routineness is found to have a positive association with network centrality, supporting Hypothesis 4. We don't find any statistically significant relationships between network centrality and job satisfaction, and between network centrality and knowledge sharing. Both Hypothesis 5 and 6 are not supported. Finally, in column 3, we found a support for Hypothesis 7, which proposed the positive relationship between knowledge sharing and job satisfaction.

Variables	(1)		(2)		(3)	
	DV=KNOWSH		DV=DEGREE		DV=JOBSA	
	β	t	β	t	β	t
JOBSP	0.214	1.912*			0.049	0.371
JOBFB	0.005	0.042			0.252	2.006*
JOBRT	-0.678	-5.872***	-0.286	-2.071**	-0.148	-0.857
DEGREE	-0.062	-0.661			0.041	0.385
KNOWSH					0.420	2.503**
R ²	0.640		0.082		0.555	
F	20.037***		4.290**		10.983***	
N	50		50		50	

Notes: * p<0.1; **p<0.05, ***p<0.01

Table 2: Result of regression analysis

5. Discussion and Conclusion

In the study, we examined the relationships among job characteristics, job satisfaction, knowledge sharing, and network centrality. First, we found that job characteristic affects an employee's knowledge sharing. Organizations can promote knowledge sharing in the organizations by adjusting the job characteristic. Next, job routineness was found to have a negative effect on network centrality. Finally, knowledge sharing is positively and significantly related to job satisfaction. Employees who share knowledge with others in organizations may feel happiness, and that leads satisfaction. For improving employees' job satisfaction, organizations need to consider the ways to promote knowledge sharing in organization.

References

- Bock GW, Zmud RW, Kim YG, Lee JN. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 29(1), 87-111.
- Brass DJ. (1981). Structural relationships, job characteristics, and worker satisfaction and performance. *Administrative Science Quarterly*, 26(3), 331-348.
- Byström K, Järvelin K. (1995). Task complexity affects information seeking and use. *Information Processing & Management*, 31(2), 191-213.
- Feeley TH, Hwang J, Barnett GA. (2008). Predicting employee turnover from friendship networks. *Journal of Applied Communication Research*, 36(1), 56-73.
- Hooff BVD, Ridder JAD. (2000). Knowledge sharing in context: The influence of

- organizational commitment, communication climate and cmc use on knowledge sharing. *Journal of Knowledge Management*, 8(6), 117-130.
- Kanawattanachai P, Yoo Y. (2007). The impact of knowledge coordination on virtual team performance over time. *MIS Quarterly*, 31(4), 783-808.
- Mehra A, Kilduff M, Brass DJ. (2001). The social networks of high and low self-monitors: Implications for workplace performance. *Administrative Science Quarterly*, 46(1), 121-146.
- Panjarasa P, Opsahl T, Carley KM. (2009). Patterns and dynamics of users' behavior and interaction: Network analysis of an online community. *Journal of the American Society for Information Science and Technology*, 60(5), 911-932.
- Teigland R, Wasko M. (2009). Knowledge transfer in mncs: Examining how intrinsic motivations and knowledge sourcing impact individual centrality and performance. *Journal of International Management*, 15(1), 15-31.
- Wasko MML, Faraj S. (2005). Why should i share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 29(1), 35-57.
- Wright BE, Davis BS. (2003). Job satisfaction in the public sector: The role of the work environment. *American Review of Public Administration*, 33(1), 70-90.