THE RELATIONSHIP BETWEEN KNOWLEDGE SHARING AND NEGATIVE ATTITUDE AGAINST EMPLOYEE MONITORING

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Abstract: Knowledge sharing in an organization is an important part of knowledge management and its success or failure will be directly related to how much knowledge could be used by employees. Unfortunately there are some de-motivators in work environment that prevent employees to share knowledge with each others. This paper intends to interrogate employee monitoring as one of the de-motivators of knowledge sharing in organizations.

In an insecure work environment where employee behaviors are monitored employees may not intend to share their knowledge with others because of confidentiality, job insecurity, mistrust. Therefore, the aim of this research is to examine the relationship between organizational knowledge sharing and employee monitoring. Employees who have negative attitude against employee monitoring complained that the implementation of electronic monitoring in their workplace caused paced work, lack of involvement, reduced task variety and clarity, reduced peer social support, reduced supervisory support, fear of job loss, routinized work activity, and lack of control over tasks. It is assumed that there is a relationship between negative attitudes against employee monitoring and knowledge sharing in organizations.

This empirical research is realized by surveying 122 employees in banking sector. In this study, with inspiration taken from the related studies in literature, the relationship between two variables was tried to be identified by conducting required statistical analysis of questionnaires applied to employees.

Keywords: Employee Monitoring, Knowledge Sharing, Organizational Knowledge Sharing

1. INTRODUCTION

It is known that today's work life has been shaped by the knowledge era that people still live. Modern technology, which refers to this era, enables knowledge to be distributed easily and fast among people. For this reason, knowledge sharing in workplace is taken under control of employers. By using the advantage of technology, employers can effectively monitor workplace activities in organization. Nevertheless, monitoring employees has been a particularly ethical issue (Hoffman, Hartman, Rowe; 2003). While employers try to monitor employees in order to keep employees work effectively; some employees think in adverse because they fell that their privacy is violated (Oz, Glass & Behling, 1999). Considering organizations as knowledge centers, controlling knowledge by monitoring employees is seen to cause high tension within organizations. This has aroused interest in researchers and led them to make empirical studies about it (D'Urso, 2006). Studies on employee monitoring are mostly seen to be realized in juridical, ethical, behavioral and organizational domains (Townsend & Bennet, 2003; Martin & Freeman, 2003; Guffey & West, 1996; Bennet & Locke, 1998; Nolan, 2003; McNall & Roch, 2007; in Erdemir, 2008).

Knowledge sharing in an organization is an important part of knowledge management and its success or failure will be directly related to how much knowledge could be used by employees. Unfortunately there are some de-motivators in work environment that prevent employees to share knowledge with each others. This paper intends to interrogate employee

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monitoring as one of the de-motivators of knowledge sharing in organizations (Oye, Mazleena, Noorminshah, 2011). In knowledge management literature, the relationship between these two variables has not been investigated before. Therefore, this study is thought to be contributive to the literature. Besides, it is also believed that such a relationship is important to be known by managers in order to keep efficiency of their employees without crossing the border of their privacy.

2. LITERATURE REVIEW

2.1. Employee Monitoring

Monitoring is said to be a dimension of surveillance which refers to a small group of people watching others (Findlay et al., 2000). Today, in workplaces employees are monitored by high technological means as a result of managers' supervision in organization. So, monitoring in organizations is mentioned as electronic monitoring. It is defined as "supervisors or their agents using devices such as video cameras, and telephone tapping devices or computers to observe and/or record worker behavior" (Hovorka-Mead et. al., 2002). There are many reasons for this trend: to reduce employee theft, to reduce insurance costs, to increase control over work behavior, and to increase productivity (Marx & Sherizen, 1987; Vaught, Taylor, & Vaught, 2000).

Many employees expect their performance to be monitored, but electronic monitoring techniques, allow managers to pursue them even out of work. They can reach to highly detailed records about employees' locations beyond walls, as well as the possibility of peering into their non-work lives, with or without their knowledge (Alge et al. 2006). Critics contend that employee monitoring turn workplaces into "electronic sweatshops" (Alder 1998). That is why in some studies it is found that monitoring is related to elevated levels of stress, and may contribute to employee health problems (Aiello 1993; Nussbaum, and du Rivage 1986; Rogers et al., 1990; Smith et al. 1992). Because surveillance activities are found intrusive and they violate a person's right to privacy; titles of many articles published on electronic employee monitoring contain negative terms such as "Big Brother" (Oz, Glass & Behling, 1999). The big brother effect in organizations is seen to cause both physical and social problems for employees. These problems contain low motivation, high stress and health problems that come with it, turnover intention, job dissatisfaction (Tabak & Smith, 2005; D'Urso, 2006; Nolan, 2003; Bradley et al., 2004; Stanton & Weiss, 2000; George, 1996; Chalykoff & Kochan, 1989). In this study it is aimed to interrogate a different variable that might be also correlated with employee monitoring.

2.2. Knowledge Sharing in Organization

Knowledge is defined as information combined with experience, context, interpretation and reflection (Davenport, Long & Beers, 1998). Since an organization is a combination people different background, having unique skills, abilities and experiences; it is seen as a highly valued knowledge treasure (Nonaka & Takeuchi, 1995). To get use of this knowledge potential, members of organization are expected to communicate effectively and enrich their knowledge capacity by sharing knowledge among each others. For this reason, Huber (1991) suggests a convenient organizational culture that supports knowledge sharing.

In highly monitored organization, employees may not be a part of such a culture because they may distrust to their organization. Oz and his colleagues (1999) assume that electronic

monitoring sends a message to employees that they are not to be trusted to do their job. A study concludes: "Electronic monitoring may create adverse working conditions such as paced work, lack of involvement, reduced task variety and clarity, reduced peer social support, reduced supervisory support, fear of job loss, routinized work activity, and lack of control over tasks" (Nussbaum, 1989). In such organizations members are said to be lack of trust. Whereas Chowdhury (2006) reports that one of the most challenging barriers hindering its wider adoption is people need to trust each other for knowledge sharing to happen spontaneously and efficiently. As result, in highly monitored work environments trust towards organization, which is prior mean for motivation (Barutçugil, 2002) is violated. Consequently in this paper, it is thought that big brother effect in organizations is also related employees' knowledge sharing. Therefore, our hypotheses are;

H1: There is a relationship between organizational knowledge sharing and employees' negative attitudes against employee monitoring

3. METHOD

The questionnaire technique was preferred as a data collection method and the sample was reached with convenience sampling method. White collar employees working in private sector were taken as the universe of the study. Two methods were followed to reach participants; surveys were distributed by email or manually.

The research instrument included two different measures and demographic questions about the participants. Employee monitoring and knowledge sharing scales were measured on a 6-point Likert-type scale ranging from "1" (strongly disagree) to "6" (strongly agree). For employees' negative attitudes against employee monitoring, the Turkish version (Erdemir & Koç, 2006) of Oz and others' (1999) scale was used. Knowledge sharing questionnaire consisted of the Ibragimova's (2006) scale, of which reliability was also found to be high in Demirel and Seçkin's (2011) research.

The total number of the participants is 122. The sample consists of 72 men with 59% and 50 women with 41%. The average age of the participants is 32.08 years.

Considering participants education level; 45.9 % have bachelor degree, 32 % master degree, 17.2 % high school degree. The rate of the participants who have PhD degree is 4.9 %.

In addition to these, the positions of the participants, 73% are employee, 19.6% are middle level, 7.4% are top level managers. Total number of male immediate supervisor is 100% with 82% and 22% female with 18%.

According to the results of participants' job experience, the mean of job experience is 7.92 years and range is 1-28, the mean of job experience in the same position is 5.07 and range is 1-22, the mean of experience with the manager is 3.26 and range is 1-18.

Table 1. Distributions of Gender, Education Level, Position and Gender of Manager

Characteristics	Frequency (n)	y Percentage (%)		
Gender				
Female	50	41.0		
Male	72	59.0		
Education Level				
High School	21	17.2		
Bachelor	56	45.9		
Master Degree	39	32.0		
Doctorate Degree	6	4.9		
Position				
Employee	89	73.0		
Middle Level Manager	24	19.6		
Top Manager	9	7.4		
Gender of Immediate Supervisor				
Female	22	18.0		
Male	100	82.0		

N = 122

Table 2. Means and Ranges of Age, Experience, Experience in the Same Position and Experience with your manager

Variable	Mean	Range
Age	32,08	23-52
Job Experience	7,92	1-28
Experience in the same position	5,07	1-22
Experience with your manager	3,26	1-18

N = 122

4. FINDINGS

4.1. Data Analysis of Employee Monitoring

The reliability and validity analysis of the 8 item questionnaire was conducted by Erdemir & Koç (2006), and the results were satisfactory; an exploratory factor analysis was also conducted for this sample in order to test the validity and the reliability of employee monitoring in the research. 3 items which measure negative attitude against employee monitoring were selected. Each step was conducted on one-item-a time basis by discarding any item which loaded to more than one factor with .10 or less difference, or that loaded less than .30. Those factors with Eigenvalues of 1.00 or more were taken in total variance explained. Principal Component Analysis with Varimax rotation were conducted, and two items were discarded one by one resulting with the 6 items of the scale showing one factor in the last analysis. The KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy was larger than .50, and Barlett test value was significant for this analysis, showing that it statistically

appropriate to rely on the results of the factor analysis. The results show that one factor explain the 55.93 % of the total variance.

For employee monitoring Cronbach's alpha coefficients were found in order to test internal reliabilities. The analysis shows that employee monitoring scale has reliability higher than .50 which indicated adequate internal consistency. The factor structure of the employee monitoring survey and the reliability of the questionnaire are presented in **Table 3**.

Table 3. Mean, Standard Deviation, Factor and Reliability Analyses of Employees' Attitudes about the Negative Effects of Electronic Monitoring

Items	Mean	Std.Dev.	Factor Loading
Even though employees are paid for their work, they are entitled to a certain degree of privacy, and should not be monitored by computers and other electronic devices.	4.63	1.40	.764
Monitoring workers through computers and other electronic devices may create undesirable tension between managers and subordinates.		1.20	.753
Monitoring workers through computers and other electronic devices may have a negative effect on employee morale, and therefore reduce productivity.		1.27	.528

Total variance explained: 55.93%

KMO Measure of Sampling Adequacy: 0.639

Bartlett's Test of Sphericity Approx. Chi-Square: 37.229, df: 3, Sig.: 0.000

Cronbach's Alpha (α): 0.604

4.2. Data Analysis of Knowledge Sharing

The reliability and validity analysis of the 11 item questionnaire was conducted by Ibragimova (2006), and the results were satisfactory; an exploratory factor analysis was also conducted for this sample in order to test the validity and the reliability of knowledge sharing in the research. Each step was conducted on one-item-a time basis by discarding any item which loaded to more than one factor with .10 or less difference, or that loaded less than .30. Those factors with Eigen values of 1.00 or more were taken in total variance explained. Principal Component Analysis with Varimax rotation was conducted, and one factor has reached in the last analysis after deletion of one question. The KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy was larger than .50, and Barlett test value was significant for this analysis, showing that it statistically appropriate to rely on the results of the factor analysis. The results show that one factor explain the 66.80 % of the total variance.

For employee monitoring Cronbach's alpha coefficients were found in order to test internal reliabilities. The analysis show that employee monitoring scale has reliability higher than .50 (α =.88) which indicated higher internal consistency. The factor structure of the knowledge sharing survey and the reliability of the questionnaire are presented in **Table 4.**

Table 4. Mean, Standard Deviation, Factor and Reliability Analyses of Organizational Knowledge Sharing

Items	Mean	Std.Dev.	Factor Loading
I will try to share my expertise more effectively that I gained by training with other members in organization	4.82	1.08	.912
I intend to share knowledge with other members in organizations.	4.80	1.13	,893
I intend to share handbooks, methods, and job analysis models with other members in organizations.	4.84	1.00	,893
Sharing knowledge with others is a beneficial activity.	5.06	1.08	.857
I desire to share knowledge concerning my organization that is taken from newspapers, magazines, scientific papers, with other members in organizations.	4.93	0.97	.849
We are always expected to share our knowledge with other members in organizations	4.78	1.06	.826
Sharing knowledge with others in organizations is a reasonable behavior.	4.74	1.01	.817
I intend to share my experience and know-how that I gained during working, in future.	4.65	1.11	.779
I will always meet other organization members' demand for the knowledge of how and with whom a thing can be done.	4.69	1.08	.689
I intend to share more openly my work reports and formal documents with other members in organization.	4.26	1.23	.604

Total variance explained: 66.80%

KMO Measure of Sampling Adequacy: 0.904

Bartlett's Test of Sphericity Approx. Chi-Square: 1.007, df: 45, Sig.: 0.000

Cronbach's Alpha (α): 0.941

4.3. Hypotheses Testing

Correlation analysis has been conducted to test the hypothesis 1 to identify the relations between variables. Pearson correlation test results showed that there is a positive and significant relationship between employee monitoring and knowledge sharing. As it is seen in Table 5, hypothesis 1 is supported.

Table 5. Means, Standard Deviations and Correlations for Study Variables

	Mean		1	2
1. Neg. Att. Against Electronic Monitoring	4,54	,97	1	
2. Org. Knowledge Sharing	4,76	,87	0.275^{**}	1

^{**} Correlation is significant at the 0.01 level (2 tailed)

4.4. Difference Analysis

Within the scope of the study, t-test and ANOVA are used for difference analysis. Hereunder, marital status and gender of immediate supervisor were analyzed by t-test and education level and position were analyzed by ANOVA. In this paper, only the analyses with significant results are represented.

Table 6. t-test "Employees' Attitudes about the Negative Effects of Electronic Monitoring" - "Marital Status"

		f(n)	Mean	Std.Dev.	t- value	Sig.
Neg. Att. Against Electronic	Single	57	4.33	1.01	-2.32	022
Monitoring	Married	65	4.73	0.89		.022

As it is seen **Table 6**, there is a significant difference (p = 0.022 < 0.05) on negative attitudes against electronic monitoring between single and married employees. ($\mu Rank_{single} = 4.33$, $\mu Rank_{married} = 4.73$).

Table 7. t-test "Organizational Knowledge Sharing" - "Gender of Immediate Supervisor"

		f (n)	Mean	Std.Dev.	t- value	Sig.
Organizational Knowledge	Female	22	5.00	0.41	2.21	024
Sharing	Male	100	4.70	0.93	2.31	.024

In terms of organizational knowledge sharing, there is a significant difference (p = 0.024 < 0.05) between male and female supervisors. According to this analysis, employees having female supervisor share more knowledge than the ones having male supervisor ($\mu Rank_{Male} = 4.70$, $\mu Rank_{Female} = 5.00$).

5. Conclusion and Further Research

While considering the results of this research, it is obviously supported literature that there is a relationship between negative attitudes against employee monitoring and knowledge sharing. On the other hand, our study gives evidence that employee monitoring does not always negatively influence knowledge sharing in organizations. We found that who have negative attitude against employee monitoring positively correlated with knowledge sharing. The tendency of participants to share knowledge can be duty to the reason that the employees might think any how they are being monitored and they do not need to hide any knowledge. As we mentioned above in literature section, in previous researches, authors found that some employees have positive attitudes about employee monitoring, while others do not. On the other hand, there is not much research conducting on these two variables in Turkey. According to Erdemir and Çeliktaş (2006), some Turkish managers have positive attitudes for employee monitoring.

Further research is needed to find out why employee monitoring influence positively knowledge sharing. The effect of other variables such as trust, values, and cultural dimensions should be measured in order to better understanding the relationship of these two variables. This study can be repeated by increasing the number of participants.

6. Limitations

This study is not without limitations. We did not distinguish among different types of employee monitoring. Employees may react differently to types of monitoring. It is reasonable to assume that the use of expert systems to monitor disbursement patterns is less intrusive, and thus evokes less resistance by employees than computer programs that monitor the rate of keystrokes or telephone conversations.

There may also be limitations regarding the sample. This sample has different kinds of sectors. Further research need to investigate that there is a significant difference in sectors or not.

References

Aiello, J. (1993). Computer-based work monitoring: Electronic surveillance and its effects. *Journal of Applied Social Psychology*, 23(7), 499-507.

Alder, S. (1998). Ethical issues in electronic performance monitoring: A consideration of deontological and teleological perspectives. *Journal of Business Ethics*, 17(7), 729-743.

Alge, B. J., Greenberg, J. & Brinsfield, C. T. (2006). An identity based model of organizational monitoring: Integrating information privacy and organizational justice. *Research in Personnel and Human Resources Management*, 25, 71-135.

Barutçugil, İ. (2002). *Bilgi Yönetimi*, Kariyer Yayınları, İstanbul. Bennet, C. S. & S. D. Locke. (1998). Privacy in the Workplace, *Labor Law Journal*, 49(1), 781-787.

Bradley J. A. G. Ballinger & S. G. Green. (2004). Remote Control: predictors Of Electronic Monitoring Intensity and Secrecy, *Personnel Psychology*, 57(2), 377-410.

Chalykoff, J., & Kochan, T. A. (1989). Computer-aided Monitoring: Its Influence on Employee Job Satisfaction And Turnover, *Personnel Psychology*, 42(4), 807-834

Chowdhury, N. (2006). Building Knowledge Management in Malaysia. Inside Knowledge, 9(7). [online]: http://www.km4dev.org/index.php/articles/news/744.

D'Urso, S. C. (2006). Who's Watching Us at Work? Toward A Structural Model of Electronic Monitoring and Surveillance in Organizations. *Communication Theory*, 16(3), 281-303.

Davenport, T., H., Long, D.W. & Beers, M.C. (1998). Successful Knowledge Management Projects, *Sloan Management Review*, (39)2, 43-57.

Demirel, Y. & Seçkin, Z. (2011). Örgütsel Adaletin Bilgi Paylaşımı Üzerine Etkisi: İlaç Sektörü Çalışanlarına Yönelik Bir Araştırma. *Bilig*, 56, 99- 119.

Erdemir, E. (2008). Bilgi Toplumunda Çalışma İlişkilerinin Yeni Boyutu: İşyeri ve Çalışanlara Yönelik İzleme Faaliyetleri ve Türkiye'deki Durum, *1. Ulusal Çalışma İlişkileri Kongresi: Sakarya Üniversitesi Bildiriler Kitabı*, 39-52.

Erdemir, E., Çeliktaş, I., (2006). Örgütsel ve Hukuki Açıdan İşyeri İzleme: Karşılaştırmalı bir inceleme *Kazanç Hakemli Hukuk Dergisi*, (19-20), 87-102.

Erdemir, E. ve U. Koç (2006). Büyük Patron Sizi İzliyor! Farklı Sektörlerde İşyeri İzleme Aracı Olarak Yeni Teknolojilerin Kullanımı: Eskişehir Örneği, 5. *Orta Anadolu İşletmecilik Kongresi, Tokat Gaziosmanpaşa Üniversitesi, Bildiriler Kitabı*, 141-148.

Bilgi Ekonomisi ve Yönetimi Dergisi / 2012 Cilt: VII Sayı: II

Findlay, P., A. McKinlay, A. Marks & P. Thompson (2000). In Search of Perfect People: Teamwork and Team Players in the Scottish Spirits Industry, *Human Relations*, 53(12), 1549–1571.

George, J. F. (1996). Computer-based Monitoring: Common Perceptions and Empirical Results, *MIS Quarterly*, 20(4), 459-480.

Guffey C. J. & J. F. West. (1996). Employee Privacy: Legal Implications for Managers, *Labor Law Journal*, 21(2), 735-745.

Hoffman, W. M., Hartman, L. P., Rowe, M. (2003). You've Got Mail . . . And the Boss Knows: A Survey by the Center for Business Ethics of Companies' Email and Internet Monitoring. *Business and Society Review*, 108(3), 285-307.

Hovorka-Mead., A., Ross, W.H., Whipple, T. & Renchin, M.B. (2002). Watching The Detectives: Seasonal Student Employee Reactions to Electronic Monitoring with and without Advance Notification. *Personnel Psychology*, 55(2), 329-362.

Huber, P. (1991). Organizational Learning: The Contributing Processes and the Literatures, London, *Organizations Science*, 2(1), 88-115

Ibragimova, B. (2006). *Propensity for Knowledge Sharing: An Organizational Justice Perspective*. Ph.D. Thesis. USA: University of North Texas.

Martin, K. & Freeman, R.E. (2003). Some Problems with Employee Monitoring, *Journal of Business Ethics*, 43(4), 353-361.

Marx, G., T. & Sherizen S. (1987). Corporations that spy on their employees. *Business and Society Review*, No. 60 (Winter), 32-37.

McNall, L.A. & Roch, S.G. (2007). Effects of Electronic Monitoring Types on Perceptions of Procedural Justice, Interpersonal Justice, and Privacy, *Journal of Applied Social Psychology*, 37(3), 658-682.

Nolan, D.R. (2003). Privacy and Profitability in the Technological Workplace, *Journal of Labor Research*, 24, Part 2, 207-232.

Nonaka, I., & Takeuchi, H. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14-37.

Nussbaum K, (1989). Computer monitoring: A threat to the right to privacy? *CPSR Annual Meeting*, Washington, DC.

Nussbaum, K. & du Rivage, V. (1986). Computer monitoring: Mismanagement by remote control. *Business and Society Review*, 56, 16–20

Oye, N.D.; Mazleena S. & Noorminshah, A. (2011). Knowledge Sharing in Workplace: Motivators and Demotivators. *International Journal of Managing Information Technology*, 3(4), 71-84.

Oz E., Glass, R. & R. Behling. (1999). Electronic Workplace Monitoring: What Employees Think? *Omega*, 27(2), 167-177.

Rogers, K.S., Smith, M.J., & Sainfort, P.C. (1990). Electronic performance monitoring, job design, and psychological stress. In *Proceedings of the human factors society 34th annual meeting*, 845-858.

Smith, M.; Carayon, P.; Sanders, K.; Lim, S.-Y., & Le Grande, D. (1992). Employee stress and health complaints in jobs with and without electronic performance monitoring. *Applied Ergonomics*, 23(1), 17-27.

Stanton, J. M. & E. M. Weiss. (2000). Electronic monitoring in their own words: an exploratory study of employees' experiences with new types of surveillance, *Computers in Human Behavior*, 16(4), 423-440.

Tabak, F. & Smith, W.P. (2005). Privacy and electronic monitoring in the workplace: A model of managerial cognition and relational trust development. *Employee Responsibilities and Rights Journal*, 17(3), 173-189.

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Townsend A. M. & J. T. Bennett. (2003). Privacy, Technology, and Conflict: Emerging Issues and Action in Workplace Privacy. *Journal of Labor Research*, 24(2), 195-205.

Vaught, B., C., Taylor, R., E. & Vaught, S., E. (2000). The attitudes of managers regarding the electronic monitoring of employee behavior: Procedural and ethical considerations. *American Business Review*, 18(1), 107-114.