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## The relationship between cyber loafing and organizational citizenship behavior: A survey study in Erzurum/Turkey

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### Abstract

The purpose of this study is to find out the relationship between cyber loafing and organizational citizenship behavior (OCB). The data for this study was gathered from 360 public workers in the province of Erzurum/Turkey. As a result of the study, we found out that there was no relationship between cyber loafing and organizational citizenship behavior. The level of cyber loafing was found as *low* and the level of OCB was found as *high*. We observed that there were statistically significant differences between the levels of cyber loafing and OCB according to the demographic characteristics of workers.

*Keywords:* Cyber loafing, Organizational citizenship behavior, Erzurum

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### 1. Introduction

The late 20th century is known as a period of major social, economic and political changes. This time is called as The Knowledge Age. Knowledge and ideas are accepted as the main source of economic growth and evaluated more important than land, labor, money, or other concrete resources in this age. Further, to be defined as a new advanced form of capitalism in which new patterns of work and new business practices have developed, and, as a result new kinds of workers with new and different skills are required.

In knowledge age (21st Century) people need knowledge but more than before. They need to be able to do things with this knowledge and to use it to create new knowledge. In the knowledge age, in spite of stability, change, is the reality of life. Thus, knowledge age workers/citizens need to be able to locate, assess, and represent new information quickly. They need to be able to communicate this to others, and to be able to work productively in collaborations with others.

As change is emphasized, linear and reductionist approaches to strategy and problem-solving are no longer sufficient for dealing with the realities of modern world. Figure1 shows the transformation over time of humankind's

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approaches to survival strategy and tactics. In the Knowledge Society, it is not enough and sometimes is misleading to rely on traditional predictive models as people become more aware of their inability to deal effectively with the increasing complexity of today's society. Foresight provides a mechanism for investigating possible futures in a complex knowledge society. Knowledge society is identified as a society based on the creation, dissemination and utilization of information and knowledge. It is a society with an economy in which knowledge is acquired, created, disseminated and applied to enhance economic and social development. Information society emphasizes amount of information available and accessible. It emphasizes technology. Knowledge society is identified as a society where information is used and applied in various fields for learning and development society (Day et al, 2009).

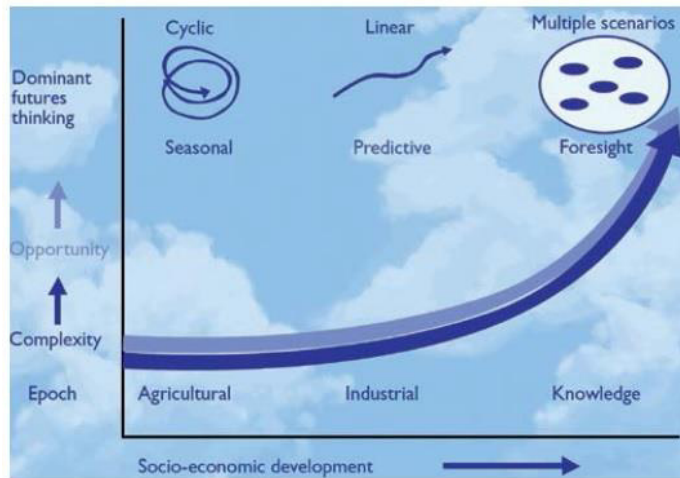


Figure 1: Evolution of futures tools through the ages (Day et al, 2009)

Castells (2005) says that the information society is the new mode of human existence, in which the production, recording, processing, and retrieving of information in organized networks plays the central role. Dominant functions and processes in the information age are increasingly organized around networks. According to Castells (2005) the network society, in the simplest terms, is a social structure based on networks operated by information and communication technologies based in microelectronics and digital computer networks that generate, process, and distribute information on the basis of the knowledge accumulated in the nodes of the networks.

In knowledge age that we now live in different information technology (IT) devices such as computers, tablets and smart phones as well as internet have become widespread. In spite of advantages of IT, it has some disadvantages which withdraw workers to their daily duties at workplace. Cyber loafing is one of such disadvantages of IT.

In knowledge age the competition among companies rises in most industries because modern and cheaper transportation and communication have caused growing global trade, and technological development has resulted quick changes in the global economy. As Katz and Kahn (1978) stated, organizational citizenship behavior is important in organizations because it can be highly valuable to organizations and can contribute to performance and competitive advantage.

Within this framework it is possible to say that both the cyber loafing and OCB are very important subjects for today organizations to reach desired objectives, and are also should be concerned as strategic issues to be dealt with. In this context, our study focuses on the relationship between cyber loafing and OCB. In this study we investigate the relationship between cyber loafing and OCB at work. The study begins by a literature review of those concepts and then will go on to development of hypotheses. Research methodology, research model and analyses results will take place at next sections. Then the results of the analyses will be discussed and recommendation will be provided.

## 2. Literature Review

### 2.1. Cyber Loafing

As mentioned above, in the last few decades, great technological advances which stimulated other important changes through the world have been observed. Development of information technologies and the internet is the most significant change which leads to information age. In the information age, internet technologies has become a part of both personal and business life and brought great benefits (Özler and Polat, 2012).

Different information technology (IT) devices such as computers, tablets and smart phones as well as internet have become widespread. Workers in organizations also use these facilities for personal purposes during work hours (Kim and Byrne, 2011).

Beside advantages of IT, there have been also some threats of misuse increased. One of the most existing cases is cyber loafing of staff in organizations. Most of the staff not only waste their time by cyber loafing also cause many problems in their organization. But today, due to expansion of local networks and internet global network, computer cannot be eliminated from the work life of any staff (Niaei et al, 2014). Therefore cyber loafing is a common fact in today organizations, as firms increasingly have high-speed access to the internet that is necessary for research, execution and communication.

Lim (2002), defines cyber loafing as below:

*“Cyber loafing refers to the act of employees using their companies’ internet access for personal purposes during work hours. Examples of cyber loafing include browsing non-job related websites (e.g. social networking, sports, news and entertainment), checking and sending personal e-mails and other activities such as online shopping and online gaming.”*

According to Askew (2012) cyber loafing may be a form of psychological withdrawal behavior and cyber loafing operates like a typical withdrawal behavior. Fisher (2004) explains psychological withdrawal as actions that provide a mental escape from the work environment. Hulin (1991) states that some business articles refer to psychological withdrawal as “warm-chair attrition,” meaning that employees have essentially been lost even though their chairs remain occupied.

Cyber loafing has been described as a form of workplace deviance. Workplace deviance means to voluntary behavior that breaks significant organizational norms, and in so doing, threatens the well-being of the organization or its members, or both. Examples of deviant behaviors at the workplace include making dirty the work environment, coming in late, falsifying receipts in order to get more payback (Robinson and Bennett, 1995).

There are some other terms which describe unproductive use of the internet in the workplace. They can be listed as *non-work related computing* (Lee et al, 2005), *cyberslacking*, *cyber deviance*, *internet abuse*, *workplace internet leisure browsing* and *junk computing* (Vitak et al, 2011).

Studies suggest different approaches about personal web usage at work as positive and negative impacts. When some of them assume that it has negative impacts on organizations in terms of productivity, legal compliance, and information security (Henle et al, 2009; Wagner et al, 2012), others emphasize more on the positive impacts as improving creativity and learning ability of employees (Oravec, 2002; Lim and Chen, 2009; Coker 2011), serving as a rest and recovery mechanism from the stress of work (Robinson and Bennett, 1995). For example, Lim and Chen (2009) say that taking time off work and using internet personally helps to refresh and revitalize employees’ minds, which in turn may help to increase productivity. In this point of view cyber loafing can be concerned similar to taking a traditional physical break from work such as walking to the pantry to get coffee, or simply taking a walk outside. By allowing employees to take a break from work, cyber loafing is likely to have a positive impact on work performance.

## 2.2. Organizational Citizenship Behavior (OCB)

Barnard (1938) stated that the willingness of individuals to contribute cooperative efforts to the organization was necessary to effective attainment of organizational goals. Katz and Kahn (1978) pointed out that organizational citizenship is important in organizations because it can be highly valuable to organizations and can contribute to performance and competitive advantage.

The concept of organizational citizenship behavior was first introduced by Organ (1988). Organ defined OCB as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization". This means citizenship behavior includes voluntary employee activities that may or may not be rewarded but that contribute to the organization by improving the overall quality of the setting in which work takes place.

According to Organ's definition, OCB reflects a "good soldier syndrome" which is so necessary for the plenty and good functioning of an organization. It means doing a better job, making an effort above and beyond formal requirements, and filling the gap between procedures and regulations on the one hand, and dynamic reality on the other. OCB is usually understood as exerting exceptionally good behaviors for the sake of the organization and informally supporting its members.

Van Dyne et al (1994) proposed the broader construct of extra-role behavior, defined as behavior which benefits the organization and/or is intended to benefit the organization, which is discretionary and which goes beyond existing role expectations.

Coleman and Borman (2000) state that there are many different types of behaviors that might seem to fit the definition of citizenship behavior, but those could be separated in two main categories that differ according to who benefits from the activity; coworkers or the organization (Figure 2)

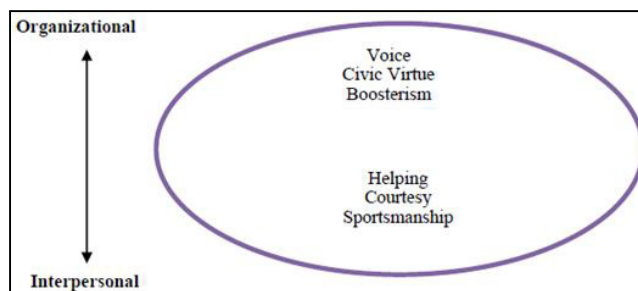


Figure 2: Types of Organizational Citizenship Behavior

The first category of citizenship behavior is the one with which someone is likely to be familiar: interpersonal citizenship behavior. Such behaviors benefit coworkers and colleagues and involve assisting, supporting, and developing other organizational members in a way that goes beyond normal job expectations. The second category of citizenship behavior is organizational citizenship behavior. These behaviors benefit the larger organization by supporting and defending the company, working to improve its operations, and being especially loyal to it (Van Dyne and Le Pine, 1998).

By reviewing the relevant literature of organizational citizenship behavior, it can be seen that there is a lack of consensus about the dimensions of OCB. Also the different labels used for the dimensions of OCB, those are the most relevant dimensions which introduced by Organ (1988) as follows:

- *Altruism*: The helping of an individual coworker on a task; voluntary actions that help a fellow employee in work related problems.

- *Civic virtue*: Participating in the governance of the organization; voluntary participation in, and support of organizational functions of both a professional and social nature.
- *Conscientiousness*: Carrying out one's duties beyond the minimum requirements; a pattern of going well beyond minimally required role and task requirements.
- *Courtesy*: Alerting others in the organization about changes that may affect their work; the discretionary enactment of thoughtful and considerate behaviors that prevent work related problems for others.
- *Sportsmanship*: Refraining from complaining about trivial matters; a willingness to tolerate the inevitable inconveniences and impositions that result in an organization without complaining and doing so with a positive attitude.

OCB is very important to organizations because they need employees who will do more than their usual job duties and provide performance that is beyond expectations. OCB describe actions in which employees are willing to go above and beyond their prescribed role requirements. As Organ (1988) suggested, high levels of OCB should lead to a more efficient organization and help bring new resources into the organization. Podsakoff et al (2000) mentioned seven ways that OCB contributes to organizational superior performance as follows:

- Increasing coworker or managerial productivity
- Releasing resources so they can be used for more productive purposes
- Coordinating activities within and across work groups
- Reducing the need to devote scarce resources to purely maintenance functions
- Strengthening the organizations' ability to attract and retain the best employees
- Increasing the stability of the organization's performance
- Enabling the organization to adapt more effectively to environmental changes.

### 3. Research

#### 3.1. Research Goal and Hypothesis

The main objective of this study is to find out the relationship between cyber loafing and OCB at work. Then it is aimed to investigate whether the demographic characteristics of workers affect the levels of cyber loafing and OCB or not. The model of our research is shown in Figure3. In this context these hypotheses are developed:

H1: *There is a negative relationship between the level of cyber loafing and OCB.*

H2: *The levels of cyber loafing and OCB differ according to demographic characteristics of workers.*

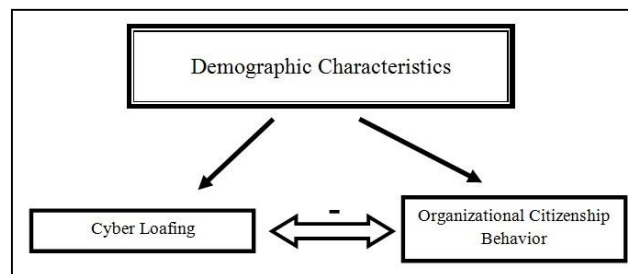


Figure3: Research Model

### 3.2. Sample and Data Collection

To test the hypotheses, a field survey using questionnaires conducted on 360 public workers in the city of Erzurum located in the Eastern Anatolia/Turkey. Data collected by postgraduate students (Hacı Arslan Uzan, Joseph Luka Madut, Nouhali Mardomkhah Khanehbargh, Pınar Yıldırım, Şeref Altunok) attending to Atatürk University Social Sciences Institute Labor Economics and Industrial Relations Program.

The questionnaire consists of two sections. First section includes questions related to the demographic characteristics of workers. Second section includes 33 items using 5 Likert-Type Scale (1=very low to 5=very high). 14 items are related to cyber loafing yielded an  $r=0.90$  Cronbach Alpha, 19 items are related to OCB yielded an  $r=0.85$  Cronbach Alpha. The Cronbach Alpha values indicate that the scales used in this survey are reliable.

To measure cyber loafing, the items adapted by Örücü and Yıldız (2014) were used. They adapted 13 items from other studies (Blanchard and Henle, 2008; Lim, 2002; Özkalp et al, 2012) and added one item. The scale consists of two dimensions as minor (8 items) and serious (6 items) cyber loafing behaviors.

Organizational Citizenship Behaviour Scale developed by Basım and Şeşen (2006) consists of 19 items including 5 dimensions based on Organ's classification.

Data obtained from questionnaires was analyzed through the SPSS 16 statistical packet program. Descriptive statistics such as frequency, percentage, mean and standard deviation, for relationships co-relation coefficient and for classification Mann Whitney-U and Kruskal Wallis tests were applied to analyze the collected data. Only observed statistically significant differences were tabulated.

To evaluate means a range table was established shown in Table1. As we used five-point Likert from 1 to 5, the step range should be found to evaluate means. We found step range as  $(5-1)/5=4/5=0.8$ . We added this value to 1 and so on. Then the range table included the situations as *very low*, *low*, *moderate*, *high* and *very high*.

Table1: Ranges to Evaluate Means

Range	Evaluation
1.00-1.80	Very low
1.81-2.60	Low
2.61-3.40	Moderate
3.41-4.20	High
4.21-5.00	Very high

### 3.3. Findings

Table2 shows the demographic characteristics of the workers. When we examine Table1, it can be seen that 18.9 % of the sample uses computer less than 1 hour a day. 43.3 % uses computer through 1-5 hours and 37.8 % uses computer more than 5 hours a day. Then we asked what percentage of this time is non-work related. 66.4% percentage of workers said that their 11-50% of computer usage time is non-work related. 4.4 % of them spend most of their computer usage time for non-work related activities. According to these results it is possible to say that computer usage takes an important place in public workers working time and it is obvious that they use some of this time for non-work related activities.

Table2. Demographic Characteristics of the Workers

	Frequency	Percent	
<b>Gender</b>	Female	100	27.8
	Male	260	72.2
<b>Marital Status</b>	Married	282	78.3
	Single	78	21.7
<b>Academic Qualification</b>	High School	120	33.3
	Vocational High School	69	19.2
	Undergraduate	152	42.2
	Graduate	19	5.3
<b>Age</b>	18-25 years	39	10.8
	26-35 years	114	31.7
	36-45 years	87	24.2
	More than 45 years	120	33.3
<b>Managerial Status</b>	Manager	53	14.7
	Officer	307	85.3
<b>Seniority</b>	Up to 5 years	125	34.7
	6-10 years	63	17.5
	11-20 years	85	23.6
	More than 20 years	87	24.2
<b>The Time of Daily Computer Usage</b>	Up to 1 hour	68	18.9
	1-5 hours	153	43.3
	More than 5 hours	136	37.8
<b>The Time of Non-Work Related Computer Usage Percentage</b>	0-10 %	239	66.4
	11-50%	105	29.2
	More than 50%	16	4.4
<b>Total</b>	<b>360</b>	<b>100</b>	

Table3 shows the means and evaluations of cyber loafing and OCB. As seen the level of serious cyber loafing is *very low* and that of minor cyber loafing is *low*. The level of one of dimensions of OCB, courtesy is *very high* meanwhile the level of OCB and the levels of other dimensions of OCB are *high*. Özkalp et al (2012) found out in their study that minor cyber loafing behavior is common but serious cyber loafing behavior is rare.

Table3: Means

	Mean	Evaluation
Cyber loafing	1.86	Low
Minor cyber loafing	2.02	Low
Serious cyber loafing	1.70	Very low
OCB	4.02	High
Altruism	4.18	High
Civic virtue	4.05	High
Conscientiousness	3.86	High
Courtesy	4.31	Very high
Sportsmanship	3.71	High

We compared the means according to gender of workers but we could not find any differences. Although Özkalp et al (2012) found cyber loafing level was higher for women but according to Örüçü and Yıldız (2014) study the level of cyber loafing does not differ in terms of gender, so the latter result is similar to our findings.

Table4 illustrates the comparison of means according to marital status of workers. According to table, single workers are more likely to cyber loaf. Örüçü and Yıldız (2014) in their research found a similar result.

Table4. Comparisons According to Marital Status (Mann Whitney U)

	Marital Status	Frequency	Mean Rank	Mann Whitney U	p
Cyber loafing	Married	282	171	8462	0.002*
	Single	78	213		
Serious cyber loafing	Married	282	174	9224	0.028*
	Single	78	203		
Minor cyber loafing	Married	282	171	8375	0.001
	Single	78	214		

\* p&lt;0.05

Table5 shows the comparison of means according to managerial status of workers. According to the findings managers have higher tendency to show OCB than officers. Kaplan and Çetinkaya (2014) found similar result in their study. According to them managers show more serious cyber loafing behavior than subordinates. Similar results obtained from some other researches. It was shown that those in high status jobs are more likely to cyber loaf. Ugrin et al (2007) said that executives and managers had a higher tendency to cyber loaf, and for this they suggested it might be because people in these positions had more stressful jobs and; therefore, they posited, were more likely to use the internet to take their mind off their work. They also proposed that the autonomous nature of higher positions might be a factor in increasing cyber loafing. Garrett and Danziger (2008) also recommended that highly paid, managers and professionals, those who were better educated, and those with greater workplace autonomy were more likely to cyber loaf than those in lower status jobs.

Table5. Comparisons According to Managerial Status (Mann Whitney U)

	Managerial Status	Frequency	Mean Rank	Mann Whitney U	p
OCB	Manager	53	222	5927	0.002*
	Officer	307	173		

\* p&lt;0.05

Table6 illustrates the comparison of means according to the age of workers. The level of cyber loafing differs according to the age of workers. To identify different age groups LSD test applied to the data. It can be seen that young workers are more likely to cyber loafing behavior. This is parallel to Özücü and Yıldız (2014) findings.

Based on these results, H2 (*The levels of cyber loafing and OCB differ according to demographic characteristics of workers*) is accepted for marital status, managerial status and age of workers.

Table6. Comparisons According to Age (Kruskal Wallis)

	Age	Frequency	Mean Rank	Difference (LSD test)	Chi-Square	p
Cyber loafing	18-25 years	39	203	18-25 differs from more than 45 26-35 differs from 36-45 26-35 differs from more than 45	23.5	0.000*
	26-35 years	114	211			
	36-45 years	87	176			
	More than 45 years	120	149			

\* p&lt;0.05

Table7 demonstrates the relationship between cyber loafing and OCB. According to the findings there is no relationship between cyber loafing and OCB. With this result H1 (*There is a negative relationship between the level of cyber loafing and OCB*) is rejected. When we set up H1, we expected a negative relationship. The Pearson Correlation Coefficient between cyber loafing and OCB is -0.025, between serious cyber loafing and OCB is -0.047 and between minor cyber loafing and OCB is -0.002. In spite of predicting the direction (-) of the relation truly, H1 is not accepted. There are other researches investigating the relationship between cyber loafing and OCB with different results. For example, Mirsepasi et al (2012) found a strong positive correlation between OCB and avoiding from psychology withdrawal behaviors. As mentioned above cyber loafing can be concerned as a kind of withdrawal. On the contrary of this results Rajah and Lim (2011) suggested that there is a positive relationship between cyber loafing and OCB. They



continue that increasing levels of cyber loafing lead to increasing levels of OCB, and it therefore should be studied as a positive construct instead of being defined as a type of workplace deviance. Although cyber loafing may lead to waste of resources and may appear to be unproductive, there may be a flipside to the coin, where it can be related to positive outcomes that benefit the organization as well. Niaei et al (2014) explained that the relationship between organizational commitment and cyber loafing was an inverse relationship whereas Yıldız et al (2014) could not find any relationship between organizational justice perception and cyber loafing.

Table7. The Relationship between Cyber Loafing and OCB (Pearson Correlation Coefficient)

		Serious cyber loafing	Minor cyber loafing	Cyber loafing	OCB
Serious cyber loafing	Pearson Correlation	1	,746**	,927**	-,047
	Sig. (2-tailed)		,000	,000	,371
Minor cyber loafing	Pearson Correlation		1	,941**	-,002
	Sig. (2-tailed)			,000	,975
Cyber loafing	Pearson Correlation			1	-,025
	Sig. (2-tailed)				,637
OCB	Pearson Correlation				1
	Sig. (2-tailed)				
**. Correlation is significant at the 0.01 level (2-tailed).					

#### 4. Conclusion

In this study, we basically try to find out the relationship between cyber loafing and OCB. Then it is aimed to investigate whether the demographic characteristics of workers affects the levels of these concepts.

As a result of the study, we found out that there is no relationship between cyber loafing and OCB. In literature there are different approaches about cyber loafing and positive organizational behaviors like OCB, commitment, avoiding withdrawal behaviors etc. Some researchers suggest cyber loafing as a negative behavior whereas others recommend it vice versa. Cyber loafing is a new concept in the field and not investigated enough yet. It will be easy to interpret the relationship between cyber loafing and other concepts clearly as new studies are going to be hold in the future. Another result is that the levels of cyber loafing and OCB differ according to some demographic characteristics (marital status, managerial status and age) of workers. Finally, we found the level of cyber loafing as *low* whereas the level of OCB as *high*. As we conducted the survey to public workers in the province of Erzurum, the data is limited to this sample. Further researches can be applied in different organizations, provinces and also countries to generalize the findings.

#### References

- Askew, K. L. (2012). The Relationship Between Cyberloafing and Task Performance and an Examination of the Theory of Planned Behavior as a Model of Cyberloafing. University of South Florida, Department of Psychology, Graduate Theses.
- Barnard, C. I. (1938). The Functions of the Executive. Cambridge, MA: Harvard University Press.
- Basım, H. N. and Şeşen, H. (2006). Örgütsel vatandaşlık ölçeği uyarılama ve karşılaştırma çalışması. Ankara Üniversitesi SBF Dergisi, 61 (4): 83-101.
- Blanchard, A.L. and Henle, C.A. (2008). Correlates of different forms of cyberloafing: the role of norms and external locus of control. Computers in Human Behavior, 24(3):1067-1084.
- Castells, M. (2005). The Network Society: From knowledge to policy. The Network Society: From Knowledge to Policy, Edited by Castells M. and Cardoso G., Center for Transatlantic Relations, Lisbon, Portugal.
- Coker, B.L.S. (2011). Freedom to surf: The positive effects of workplace internet leisure browsing, new technology, Work and Employment, 26 (3): 238-247.
- Coleman, V. I. and W.C. Borman, W. C. (2000). Investigating the underlying structure of the citizenship performance domain. Human Resource Management Review, 10 (2000): 25-44.
- Day, B., Greenwood, P. and Karuri-Sebina, G. (2009). Thinking about Tomorrow Today: An Introduction to Using Foresight in South Africa. A Publication of the Cooperation Framework on Innovation Systems between Finland and South Africa.
- Fisher, A. (2004). Turning clock-watchers into stars. Fortune, March 22.

- Garrett, R. K. and Danziger, J. N. (2008). On cyberslacking: workplace status and personal internet use at work. *CyberPsychology & Behavior*, 11(3): 287-292.
- Henle, C.A., Kohut, G. and Booth, R. (2009). Designing electronic use policies to enhance employee perceptions of fairness and to reduce cyberloafing: An empirical test of justice theory. *Computers in Human Behavior*, 25: 902-910.
- Hulin, C.L. (1991). Adaptation, persistence, and commitment in organizations. In *Handbook of Industrial and Organizational Psychology*, Ed. M.D. Dunnette and L.M. Hough. Palo Alto, CA: Consulting Psychologists Press, Inc., 1 (2): 445–506.
- Kaplan, M. and Çetinkaya A.Ş. (2014). Sanal kaytarma ve demografik özellikler açısından farklılıklar: Otel işletmelerinde bir araştırma, *Anatolia: Turizm Araştırmaları Dergisi*, 25 (1): 26 – 34.
- Katz, D. and Kahn, R. L. (1978). *The Social Psychology of Organizations*, New York.
- Kim, S. J. and Byrne, S. (2011), Conceptualizing personal web usage in work contexts: A preliminary framework, *Computers in Human Behavior*, 27: 2271–2283.
- Lee, O. K., Lim, K. H. and Wong, W. M. (2005). Why employees do non-workrelated computing: An exploratory investigation through multiple theoretical perspectives. In *System Sciences. HICSS'05. Proceedings of the 38th Annual Hawaii International Conference on IEEE*.
- Lim, V. K. G. (2002). The IT way of loafing on the job: Cyberloafing, neutralizing and organizational justice. *Journal of Organizational Behavior*, 23: 675-694.
- Lim, V.K.G. and Chen, D.J.Q. (2009). Cyberloafing at the workplace: Gain or drain on work? *Behaviour & Information Technology*. 1-11.
- Mirsepasi N., Memarzadeh G., Alipour H. and Feizi M. (2012). Surveying the relationship between citizenship and withdrawal behaviors in Iranian public organizations. *Interdisciplinary Journal Of Contemporary Research In Business*, 4 (5): 642-652.
- Niaei, M., Peidaei, M. M. and Nasiripour, A. A. (2014). The relation between staff cyber loafing and organizational commitment in organization of environmental protection. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 3 (7): 59-71.
- Oravec, J.A. (2002). Constructive approaches to internet recreation in the workplace. *Communications of the ACM*. 45 (1): 60-63.
- Organ, D. W. (1988). *Organizational Citizenship Behavior: The Good Soldier Syndrome*. Lexington, MA: Lexington Books.
- Örtücü, E. and Yıldız, H. (2014). İşyerinde kişisel internet ve teknoloji kullanımı: Sanal kaytarma, *Ege Akademik Bakış*, 14 (1): 99-114.
- Özkalp, E., Aydın, U. and Tekeli, S. (2012). Sapkın örgütsel davranışlar ve çalışma yaşamında yeni bir olgu: Sanal kaytarma (cyberloafing) ve iş ilişkilerine etkileri. *Çimento İşveren Sendikası Dergisi*, 26(2):18-33.
- Özler, D. E. and Polat, G. (2012). Cyber loafing phenomenon in organizations: Determinants and impacts, *International Journal of E-business and E-government Studies*. 4 (2): 1-15.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., and Bachrach, D. G (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research, *Journal of Management*, 26: 513-563.
- Rajah, R. and Lim V.K.G. (2011). Cyberloafing, neutralization, and organizational citizenship behavior. *PACIS 2011 (15th Pacific Asia Conference on Information Systems: Quality Research in Pacific) Proceedings*. Paper 152. <http://aisel.aisnet.org/pacis2011/152>
- Robinson, S. and Bennett, R. (1995). A typology of deviant workplace behaviors: A multi-dimensional scaling study. *Academy of Management Journal*, 38, 555-572.
- Ugrin, J.C., Pearson, J.M. and Odom, M.D. (2007). Profiling cyber-slackers in the workplace: Demographic, cultural and workplace factors. *Journal of Internet Commerce*, 6 (3): 75-89.
- Van Dyne, L., Graham, J. W., and Dienesch, R. M. (1994). Organizational citizenship behavior: Construct redefinition, measurement, and validation. *Academy of Management Journal*, 37: 765-802.
- VanDyne, L. and LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity, *Acad Manage J*, 1 (41): 108-119.
- Vitak J., Crouse, J. and LaRose, R. (2011). Personal internet use at work: Understanding cyberslacking. *Computers in Behavior*, 27 (5): 1751-1759.
- Wagner, D. T., Barnes, C.M., Lim, V.K.G. and Ferris, D.L. (2012). Lost sleep and cyberloafing: Evidence from the laboratory and a daylight saving time quasi-experiment. *Journal of Applied Psychology*. 97 (5): 1068-1076.
- Yıldız, H., Yıldız, B. and Ateş, H. (2014). Sanal kaytarma davranışlarının sergirilmesinde örgütsel adalet algısının rolü var mıdır? 12. Uluslararası Bilgi, Ekonomi ve Yönetim Kongresi Bildirileri, 169-180.