

The Relationship Between Cyber Loafing And Task Performance and an Examination of General Self-Efficacy as a Mediator

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*Cyber loafing,
General Self-efficacy,
task performance,
public sector hospitals.*

ABSTRACT

Because of the diffusion of wireless networks and mobile technologies in society and in learning environments, studies have investigated that employees incline to cyber loafing during their duty hours. As a result, their performance is impeded and they could be distracted from the course. Hospitals are places where patients are treated with extreme care and caution. Pakistan is under developed country and moving towards knowledge-based society where, doctors interact with each other through mobile or other network technology for chatting and sharing information. As a result, their routine duty is adversely affected. Hence, this research was proposed to explore the role of self-efficacy in the relation between cyber loafing and task performance in the public sector hospitals of Peshawar city. A threefold investigation was performed: a) to test the association of cyber loafing and task performance, b) investigate the influence of cyber loafing and self – efficacy, and c) to examine the mediating role of self-efficacy between cyber loafing and task performance. One hundred and ninety doctors and twenty-five supervisors participated in this study. Results reveal that cyber loafing has significant relation with task performance and self-efficacy. The results also found that self- efficacy meditates the relation between cyber-loafing and task performance. . This might be a unique contribution of this study and will contribute the existing literature in the context of organizational behavior.

INTRODUCTION

The late 20th century is known as a period of major economic, political, technological and social changes. This era is referred as “*The Knowledge Age*” (Çınar & Karcıoğlu, 2015). Internet has served to spread knowledge in the masses and have been very substantial in reducing the cost of communication (Leamer & Storper, 2014). It has converted the working environment into a worldwide-networked environment, thus strengthening the institutions. However, at the same time, the Internet has also opened other avenues of divergent workplace behavior, for instance, employees’ involvement in net surfing during working hours. This specific type of inverse behavior in organizations is labeled as “*cyber loafing*” (Zoghbi Manrique de Lara, Verano Tacoronte, & Ting Ding, 2006) and known as institutional deviance (Lim, 2002). Lim (2002) defines cyber loafing as “*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.*”

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Askew (2012) argued that cyber loafing is a sort of emotional withdrawal behavior. Fisher (2004) earlier explained that such psychological withdrawal is the actions of employees that offer a mental escape from duties and working environment. Hulin (1991) posited that few business publication denote psychological withdrawal as “*warm-chair attrition*” means that employees are mentally absent though their chairs remain occupied.

Fox (2007) argued that circumstantial evidences reveal that few employees spend approximately six hours a day surfing the internet during duty. Cubed (2006) conjured that because of non-job-related web browsing and work deferment lead to diminishing in productivity and monetary loss to organizations. Thus, non-work-related cyber loafing apparently seems to be a counter-productive work behavior in the contemporary organization. It is classified as a kind of postponement behavior at work. Hence, employees engage in cyber loafing applying delay tactics at work (Prasad, Lim,& Chen, 2010).

Though the use of computer, software and other social media apps in organizations have boosted productivity, enhance employees’ performance but has also permitted slack off at job. The inferences of this slacking-off conduct are not clear but several organizations are worried about its impact on the work performance of employees (Wire, 2000). This study is aimed at investigating the impact of cyber loafing on task performance of doctors in the public sector hospitals and to explore the meditating role of self-efficacy between cyber loafing and task performance.

LITERATURE REVIEW

Cyber loafing

The emergence of cyber science and World Wide Web (www) bring a new term called “*cyber loafing*”. It is coined by Tony Cummins (1995) and further introduced in New York’s daily news. Jandaghi, Alvani, Zarei Matin, and Fakheri Kozekanan (2015) argued that this new concept grew notoriety when it was used in the publication of Lim (2002). It is the combination of two words “*cyber*” and “*loafing*”. In 1995 the term “*cyber*” was familiarized as a prefix idioms for the use of computer as an instrument. The word “*loafing*” was extracted from ‘loafer’ which means a person waste his time. Thus, cyber loafing means when an employee wastes his time on computer during his duty hours (Moody, 2011).

Prasad *et al.*, (2010) explained that “*voluntary acts of employees’ using their companies’ internet access during office hours to surf non-work related web sites for personal purposes*”. During the last decades technological advancement has stimulated meaningful changes in the world. The expansion of internet and information technology has fetched significant changes which primes to information era. In this era, internet has become important for personal and business life and has benefited both sides (Çınar & Karcioğlu, 2015). Despite that Verton (2000) argued that it has costly and common issue for organization. An investigation of 1,000 employees in the USA shown that 64 percent of them use internet for personal purposes in job. Because of cyber loafing the performance of employee’s fall 30 to 40 percent. Earlier, Internet surveillance company also estimated that “*recreational web surfing*” cost US business \$5.3 billion in 1999 (Bronikowski, 2000).

Cyber loafing and Task Performance

Although the ancestors of cyber loafing have been examined frequently, much fewer studies has investigated the consequences of cyber loafing. Surprisingly, the consequences of cyber loafing are

important reason to investigate it. The task performance construct is a specific concern in this study, hence it is assumed that cyber loafing theoretically has negative effects on the performance. Though, there

has been a lack of empirical exploration on how cyber loafing influences task performance, there are diverse speculations in the literature (Askew, 2012).

Barlow, Bean, and Hott (2003) found that cyber loafing has a negative impact on task performance. It is because of time spent on the internet and was not devoted for productivity. Lim and Chen (2009) posited that social attitude is also harmful for productivity, hence relationship building behavior of employees requires more time, cognitive resources and energy. It is heard for employees to turn back to job-related tasks from browsing the web and has a negative impact on task performance. Belanger and Van Slyke, (2002) found that cyber loafing offers a respite from work, enhancing performance once the workers return to job. The authors further explored that it is because of intellectual resources are exhausted in task performance and cyberloafing recuperates these resources permitting employee to become more productive. Blanchard and Henle (2008) investigated that web browsing does not influence task performance. They argued that employees have specific work to perform and they do cyber loafing when they are free.

Still, these above perceptions have had mixed success, different studies have found modest association between the antecedents and cyber loafing and the outcomes have not always replicated. Therefore, this research is intended to investigate the relationship between cyber loafing with the task performance in the hospitals of Peshawar city.

General Self-efficacy and Cyber loafing

Self-efficacy refers to the ability of employees to identify themselves as extremely attentive and have a clear vision of their goals (Prasad et al., 2010). Bandura (1997) posited that such individuals have the greatest score on self-efficacy and have confidence that will do well on a given assignment. Moreover, such individuals have strong influence on cognitions, on their attitudes and have the ability to control stressful situations. Garrett and Danziger (2008) concluded that cyber loafing at job results from extreme self-efficacy levels. In the same vein McCoy (2010) found that workers with high level of self-efficacy are having higher level of computer self-efficacy and are technological competent. Ko, Lee, and Kim (2012) also found the same significance linkages between cyber loafing and self-efficacy. Locke and Latham (1990) earlier noted that highly efficacious employees have the 'perception' that they are proficient enough to moderate and plan their behaviors so to control their effort steadily over period time.

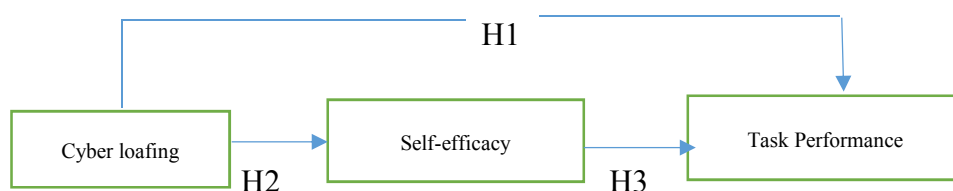
Çınar and Karcıoğlu (2015) conjured that in the arena of management cyber loafing is a contemporary issue which needs serious attention and investigation in public sector institutions. It is proposed to understand the significance of cyber loafing with some other variables. So that the new concept will proceed. There is dearth of research on self-efficacy and cyber loafing. Though, previous investigations have found medium level of positive association between the two variables (Prasad et al., 2010). The author further elaborated that self-efficacy intensifies the negative association between cyber loafing and self-regulation, since employees who have high level of self-efficacy will observe themselves to be best regulators and therefore not cyber loaf. It is inferred from the above discussion that mixed opinions exist between cyber loafing and task performance and similarly between cyber loafing and self-efficacy in the literature. Keeping in view the above context the below hypotheses are developed:

H₁: There is a relationship between cyber loafing and task performance.

H₂: There is a relationship between cyber loafing and self-efficacy.

H₃: *Self- efficacy mediates the relation between cyber loafing and task performance.*

Figure-1: Conceptual Model



METHODOLOGY

Research Design

The data for the study was collected through a cross-sectional survey using a closed-ended questionnaire. The questionnaire comprised 19 items on Cyber Loading, task performance was assess using supervisor as it is non-exploratory variable and 10 items on General Self Efficacy. The questionnaire was also designed to collect demographic information of respondents. The data was collected from 6 public sector hospitals of Peshawar. Responses on all the research variables were collected through pre-tested scales used in earlier studies.

Procedure and Sample Characteristics

Data were collected from 190 doctors and 25 supervisor employed in the public sector hospitals in Peshawar city. Data were composed using survey questionnaires. Two different set of questionnaires were used in this investigation. Data regarding cyber loafing and general self-efficacy behavior were taken from the doctors, while date of their task performance were taken from their immediate supervisor. There are total six public sector hospitals in Peshawar included; Lady Reading Hospital, Hayatabad Medical Complex Peshawar, Khyber Teaching Hospital, Molvi Jee Hospital, Government Naseerullah Khan Babar Memorial Hospital Peshawar and Sefat Ghavior Hospital. As per the Khyber Pakhtunkhwa (KP) Health Department there are total 735 doctors serving in these hospitals. Simple random sampling method was applied to obtain data from the selected sample size. Total 280 questionnaires were served out of which 215 were received back with a response rate of 76%. Such a high response rate is quite normal in Pakistani context (Tufail, Shahzad, Gul & Khan, 2017). Seventy five percent of the respondents were male doctors with an average age of 37 years and twenty five percent were female doctors, participated in this research with an average age of 35 years. The average job tenure of male doctors were 10 years and for female employees it was 8 years.

Cyber loafing

To measure cyber loafing behavior Lim's (2002) six point scale was used (1 = Never, 4 = Once a Day, 6 = Constantly) adopted from the dissertation of (Askew, 2012). An example of an item is "Visit non-job related websites" All the selected items denote to alleged surfing and misuse of internet facility as per the hospitals internet usage policy.

Task Performance

To measure task performance of employees William and Anderson's (1991) task performance scale was adopted. This scale is also used in the dissertation of (Askew, 2012). This is the only non-exploratory variable and is fill by the supervisor. The immediate administrators rated the performance of their subordinate on a five-point scale (1 = A lot less than others, 5 = A lot more than others). An example item include "It is easy for me to stick to my aims and accomplish my goals".

General Self-Efficacy

We measure general self-efficacy of individuals through the scale developed by the Schwarzer and Jerusalem (1995). This scale is used to determine individuals' insights regarding their skills to handle with and adapt to life. This scale consist of ten items in a four point Likert-type scale where (completely wrong=1 and completely right=4). An example item include "Fulfills the responsibilities specified in job description".

DATA ANALYSIS AND RESULTS

Table 1. Means, Standard deviations, Coefficient Alphas, and correlations between variables

Means, Standard deviations, Coefficient Alphas, and correlations between variables					
Variables	M	SD	1	2	3
1 Cyber loafing	3.76	0.77	(0.76)		
2 General Self-Efficacy	3.91	0.61	0.61**	(0.71)	
3 Task Performance	4.57	0.63	-0.57**	0.63**	(0.73)

N=215; Cronbach Alpha in parenthesis.

** Correlation is significant at the 0.01 level (2-tailed).

Table 1 above have determine the standard deviations, means, correlations and coefficient alphas of the research variables. It explicate that cyber loafing is correlated with general self-efficacy ($r = 0.61$, $p < 0.01$) and negatively with task performance ($r = -0.57$, $p < 0.01$) and the correlation of self-efficacy and task performance is ($r = 0.63$, $p < 0.01$). These values provide initial support to the anticipated hypotheses. The table also clarifies the reliability via Cronbach Alpha values of the variables of the study. All values are above 0.7, suggesting that the data is consistent internally (Hair, Black, Babin, Anderson, & Tatham, 1998). However, Flynn *et al.* (1990) recommended the value ranging about from 0.895 to 0.946. Hence, all sub-scales revealed well over the lowest adequate reliability level of 0.7.

Table 2. Simple Regression Analysis

	β	t	sig
CL → SE	0.58	9.73	0.000
SE → TP	0.67	8.32	0.000
CL → TP	-0.61	-7.17	0.000

CL (cyber loafing), SE (Self Efficacy), TP (Task Performance)

Regression analysis were conducted to explore the relation of research variables. The table 2 shows that CL has noteworthy influence on SE ($\beta=0.58$, $p<0.05$) and SE has positive significant influence on TP where ($\beta=0.67$, $p<0.05$). However, CL has negative outcome on the employees level of TP ($\beta=-0.61$, $p<0.05$). All the values are significant, thus, supporting the indicated hypotheses.

Mediating Regression Analysis

In this investigation Preacher and Hayes (2004) bootstrapping techniques was performed to find the mediating outcome of self-efficacy between cyber loafing and task performance. As compare to Baron and Kenny (1986) this test is considered superior and Sobel test. According to (Preacher & Hayes, 2004), if zero is not included in the 95% CI for indirect effect, mediation is determined. Below in table 3 the mediation analysis results are presented.

Table3. Mediating Regression Analysis

Path	Total effect	Direct effect	Indirect effect	95% CI	
				Lower level	High level
CL → SE → TP	0.64	0.13	0.51	0.35	0.58

The above table explain that the direct effect of cyber loafing (CL) on task performance (TP) was (.13, $p < .01$) and the indirect effect via self- efficacy was significant (.51, $p < .01$, 95% CI=0.35, HI 0.58). The standardized total (direct and indirect) result of (CL) on (TP) was found 0.64, that is because both direct (unmediated) and indirect (mediated) effects of cyber loafing on task performance, when self-efficacy increases by 1 standard deviation, task performance increases by 0.64 standard deviations. The current result indicated that H3 of the research study was supported and confirmed that self-efficacy mediates the relationship between cyber loafing and task performance.

DISCUSSION

Previous investigations concluded that contextual and dispositional factors are significant in predicting cyberloafing. However, it is the consequences of inhibited self-control. Employees who cannot regulate

and control their consideration predict more counterproductive behaviors (Prasad et al., 2010). Çınar and Karcioğlu (2015) explained that it is a new thought and not explored sufficiently. They elaborated that it is not difficult to establish the linkages of cyber loafing with others concepts as unusual exploration is to be held in future. This study found that cyber loafing has negative relation with task performance in the public sector hospitals of Peshawar city. Barlow et al., (2003) and Blau, Yang, and Ward-Cook (2006) elaborated the same negative association of cyber loafing with task performance. Jandaghi et al., (2015) also explored that cyber loafing could potentially have an extremely negative impact on performance and productivity of employees in work places.

This study also found that cyber loafing has direct relation with self-efficacy. Prasad et al. (2010) also found a positive linkage of cyber loafing with self-efficacy. This investigation was intended to explore the mediating outcome (self- efficacy) on the linkage between cyber loafing and task performance. This study confirmed the meditating relation between cyber loafing and task performance and established a new model in the field of organizational behavior. In respect to self-efficacy, interesting pattern of results emerged.

Askew (2012) conjured that individuals on the low level self-efficacy incline to have irrational attitude about their success in job. Bandura, Barbaranelli, Caprara, and Pastorelli (1996) earlier explained that a sense of no confidence and anxiety of failure exist in them, spending more time adjourning rather using their energies on the relevant task. Following the recommendation of Prasad (2010) that further inquiry is needed to explore that if cyber loafing on a desktop operates differently than cyber loafing on a cellphone the current study was conducted to enrich the literature and provide empirical evidences in such domain.

MANAGERIAL CONTRIBUTION

Understanding the association between cyberloafing and task performance and the meditating role of self-efficacy will permit the public sectors decision makers to make policies on the tradeoffs. For instance, time consumed on video games, movies and others such like activities take more time and thus have negative impact on performance, while shorter entertainment, less committed activities such as checking email refresh the employees and offer a break from work, enhancing performance once they return to their duties. So, it is suggested that public sector organizations should adopt policies that are job specific, imposing restrictions on the use of unnecessary mobiles, apps etc. and may only be allowed to access them for necessary personal use where needed. To improve the performance of hospitals and minimize the rate of mishandling in situation where extreme focus is required (like Operation Theater) it is further recommended that the use of mobile, app etc. should strictly be forbidden. Cyber loafing is becoming a universal problem which may not be restricted to public sector organizations only and self-efficacy is just one determinant; so, this research has highlighted the role of personality variable in expanding the association between cyber loafing and self-regulation in respect to task performance.

REFERENCES

- Askew, Kevin Landon. (2012). The relationship between cyberloafing and task performance and an examination of the theory of planned behavior as a model of cyberloafing.
- Bandura, A. (1997). Self-efficacy: The exercise of control: New York: Freedom and Company.
- Bandura, Albert, Barbaranelli, Claudio, Caprara, Gian Vittorio, & Pastorelli, Concetta. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child development*, 67(3), 1206-1222.
- Barlow, Judith, Bean, LuAnn, & Hott, David D. (2003). Employee “spy” software: Should you use it?

Journal of Corporate Accounting & Finance, 14(4), 7-12.

- Baron, Reuben M, & Kenny, David A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Blanchard, Anita L, & Henle, Christine 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.
- Blau, Gary, Yang, Yang, & Ward-Cook, Kory. (2006). Testing a measure of cyberloafing. *Journal of Allied Health*, 35(1), 9-17.
- Bronikowski, L. (2000). Esniff.com sniffs out cyberslacking. *ColoradoBiz*, 27(11), 46.
- Çınar, Orhan, & Karcioğlu, Fatih. (2015). The relationship between cyber loafing and organizational citizenship behavior: A survey study in Erzurum/Turkey. *Procedia-Social and Behavioral Sciences*, 207, 444-453.
- Cubed, Debt. (2006). Are your internet costs going through the roof. *Debt Cubed*, 21(1), 10.
- Fisher, A. (2004). Turning clock-watchers into stars: Time Inc Time & Life Building Rockefeller Center, New York, Ny 10020-1393 Usa.
- Flynn, Barbara B, Sakakibara, Sadao, Schroeder, Roger G, Bates, Kimberly A, & Flynn, E James. (1990). Empirical research methods in operations management. *Journal of Operations Management*, 9(2), 250-284.
- Fox, Adrienne. (2007). Caught in the Web: Internet surfing takes on addictive qualities for some employees who may be hiding their abuse at work-at a cost to both themselves and their employers. *HR Magazine*, 52(12), 34.
- Garrett, R Kelly, & Danziger, James N. (2008). Disaffection or expected outcomes: Understanding personal Internet use during work. *Journal of Computer-Mediated Communication*, 13(4), 937-958.
- Hulin, Charles. (1991). Adaptation, persistence, and commitment in organizations.
- Jandaghi, Gholamreza, Alvani, Seyed Mehdi, Zarei Matin, Hasan, & Fakheri Kozekanan, Samira. (2015). Cyberloafing management in organizations. *Iranian Journal of Management Studies*, 8(3), 335-349.
- Ko, Ki-Sook, Lee, Myoun-Jae, & Kim, Young-Eun. (2012). A research on addictive use of smartphone by university students. *Journal of Digital Contents Society*, 13(4), 501-516.
- Leamer, E. E., & Storper, M. (2014). The economic geography of the internet age. In *Location of International Business Activities* (pp. 63-93). Palgrave Macmillan, London.
- Lim, Vivien KG. (2002). The IT way of loafing on the job: Cyberloafing, neutralizing and organizational justice. *The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 23(5), 675-694.
- Locke, Edwin A, & Latham, Gary P. (1990). A theory of goal setting & task performance: Prentice-Hall, Inc.
- McCoy, Cindy. (2010). Perceived self-efficacy and technology proficiency in undergraduate college students. *Computers & Education*, 55(4), 1614-1617.
- Moody, Gregory. (2011). A multi-theoretical perspective on IS security behaviors. *Väitöstudkimus*. Oulu: Oulun yliopisto.
- Prasad, Smrithi, Lim, Vivien KG, & Chen, Don JQ. (2010). Self-Regulation, Individual Characteristics and Cyberloafing. Paper presented at the PACIS.
- Preacher, Kristopher J, & Hayes, Andrew F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods*, 36(4), 717-731.
- Schwarzer, Ralf, & Jerusalem, Matthias. (1995). Optimistic self-beliefs as a resource factor in coping with stress Extreme stress and communities. *Impact and intervention*, 159-177.
- Tufail, M., Shahzad, K., Gul, A., & Khan, K. (2017). The Impact of Challenge and Hindrance Stressors on Job Satisfaction: Moderating Role of Islamic Work Ethics. *Journal of Islamic Business and management*, 7(1), 100-113.
- Verton, D. (2000). Employers OK with e-surfing. *Computerworld*, 34(51), 1-2.
- Wire, Business. (2000). Landmark Survey by Telemate. Net Software Shows that 83% of Companies Are Concerned With the Problem of Internet Abuse. *Business Wire*.
- Zoghbi-Manrique-de-Lara, Pablo. (2012). Reconsidering the boundaries of the cyberloafing activity: the case of a university. *Behaviour & Information Technology*, 31(5), 469-479.
- Zoghbi Manrique de Lara, Pablo, Verano Tacoronte, Domingo, & Ting Ding, Jyh-Ming. (2006). Do current anti-cyberloafing disciplinary practices have a replica in research findings? A study of the effects of coercive strategies on workplace Internet misuse. *Internet Research*, 16(4), 450-467.