

## A Review on Cyberloafing: The Effects of Social Platforms on Work Performance

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### ARTICLE INFORMATION

#### Article History:

Received August 18, 2021

Revised November 20, 2021

Accepted June 02, 2022

#### DOI:

[10.21532/apfjournal.v7i1.249](https://doi.org/10.21532/apfjournal.v7i1.249)



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### ABSTRACT

*Cyberloafing is a collection of work-related behaviours in which an employee engages in electronically-mediated activities, notably through the use of the internet, that are unrelated to their job duties. The development of communication technology has become a blessing in disguise for employees' work performance, and over the years, organisations have tried to improve work-related activities that would have an impact on their employees' work performance and also deal with how they cope with the usability of the internet. This paper aims to review and analyse cyberloafing with regards to the use of social platforms on work performance in previous studies conducted in Saudi Arabia. The findings demonstrate that increasing educational activities on an hourly basis has a favourable impact on work performance, whereas reducing time spent on social media networks increases time spent on work-related activities and hence increases work performance. Employers should create a balance between work and leisure time for their employees to ensure more productivity as technology makes people spend more time on their devices. Hence, work-leisure policies will be crucial in improving work performance and maintaining discipline during working hours.*

*Keyword: Cyberloafing, Cyberslacking, Non-Work-Related Computing, Social Networks, Work Performance*

### 1. INTRODUCTION

The development of science and technology has made people adopt smartphones, tablets, personal computers, and iPads as one of their basic needs, and these devices have caused employees' minds to be offline at work and online on social media. Internet technologies have become

an inextricable aspect of people's personal and professional lives in this information age, and they have brought immense benefits. Organisations, in particular, have indeed been quick to recognize and capitalise on the internet's promise as a platform for conducting business in unconventional ways and as a tool for

#### How to Cite:

Ngowella, G.D., Loua, L.R., Suharnomo. (2022) 'A Review on Cyberloafing: The Effects of Social Platforms on Work Performance', *Asia Pacific Fraud Journal*, 7(1), pp. 27-39. doi:<http://doi.org/10.21532/apfjournal.v7i1.249>.

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Association of Certified Fraud Examiners (ACFE)

Indonesia Chapter

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improving employee performance (Ozler & Polat, 2012). Organizations have reaped numerous benefits from the Internet. Despite its advantages, however, there are also drawbacks, including vulnerability to security flaws, invasion of privacy, employee Internet abuse, and Internet addiction. These are just a few of the issues that companies of all sizes face as they delve into cyberspace (Lim and Teo, 2005).

With the advancement of communication and technology, the phrase "cyberloafing" now refers to the use of internet connections by both corporations and individuals for personal gain during working hours (Beri and Anand, 2020). Lim & Teo, (2005) defined cyberloafing as "the act of employees using their companies' Internet access for personal purposes during work hours' which differs from their stipulated working routines, and as such, employees' work performance tends to be affected along the way. Personal Internet use at work is depicted in contemporary literature as a problematic behavior that is particularly common among lower-status employees, and it is viewed as a Specifically, it is a work-avoidance strategy that primarily serves as a means of expressing workplace grievances and, to a lesser extent, as a source of personal gratification (Garrett and Danziger, 2008).

At the organizational level, it is seen necessary to prohibit employees from Cyberloafing on the grounds that it deprives employees of time, concentration, and energy, all of which are detrimental to work performance (YOUNG, 2004). However, the urge of employees to engage in non-work-related-activities grows from one decade to the next as more and more people continue to use the internet for different purposes. Some workers spend an average of 5–6 hours per day surfing the internet at work (Fox, 2007), and in America, for example, employees' waste 200.6 million hours a week while in the UK an about 40% of employees' time is wasted on Cyberloafing (Lim and Chen, 2012).

In the past two decades, human resource scholars have been researching extensively on employees' behaviours that make them deviate from their assignments (ROBINSON and BENNETT, 1995; Yusof *et al.*, 2019; Karimi Mazidi *et al.*, 2020). Yaşar & Yurdugül, (2013) categorise cyberloafing into the following categories; personal (shopping, gambling, vacation arrangements, searching for new jobs, banking), social (social media, online discussion platforms, direct messages or emails), news (news, sports, weather forecast etc.) and searching (pictures, videos, etc. on search engines) as the behaviours of Cyberloafers.

The goal of this research is to examine the impact of cyberloafing on employee productivity by examining the activities they engage in to see if they are work-related. The goal is to shed light on the effects of cyberloafing, with a focus on social network usage, and to identify solutions to increase employee job efficiency.

## 2. LITERATURE REVIEW AND HYPOTHESIS

### Background

The common thread that is found among the defined terms on Cyberloafing is that they all describe the employee's unproductive usage of internet connections while at their workplaces, which may eventually result in a drop in the worker's performance (Ugrin, Pearson, and Odom, 2008). Employees use the internet for non-productive purposes such as emailing, scrolling on social media, sports, news, entertaining pages, and moving pictures during working hours, which has become "a new temptation for employees as an alternative to shrinking to work" (D'Abate, 2005; Blanchard & Henle, 2008; Lim & Chen, 2012).

Cyberloafing (both surfing the Web and checking email for personal purposes at work) is a waste of time that can be classified as deviant workplace behaviour. Workplace deviance refers to voluntary behaviours undertaken by members of an organisation that breach significant

organisational standards and have a negative impact on the organisation's and/or its members' well-being. In order to comprehend the language of cyberloafing in the context of product deviance, the Robinson and Bennett topology can be used to divide cyberloafing into five (5) categories, each of which comprises relatively modest, organizationally detrimental misbehaviour. The other three are (a) property deviance, which involves the unauthorised taking or damage of tangible company property; (b) political deviance, which involves employees engaging in social interactions that disadvantage other people on a personal or political level; and (c) Personal aggression, as well as aggressive or hostile behavior toward others, are all examples of personal aggression (Lim and Teo, 2005).

Other scholars, unlike Lim and Teo, have looked into and recognized different dimensionalities. Minor cyberloafing consists mostly of email-related and slacker behaviors, whereas serious cyberloafing includes behaviors such as accessing adult-oriented sites and online gambling. Blanchard and Henle (2008), experimentally defined two primary kinds of cyberloafing, minor and serious. Other researchers looked at the effects of cyberloafing and how it could lead to the development of cyberloafing behaviors, which identify the many activities that employees participate in and how organizational justice beliefs are recognized as restraining aspects of cyberloafing. However, it is important to note that cyberloafing reliance is influenced not just by psychological variables, but also by work environment and personal demands.

Furthermore, there is insufficient study on the consequences of social media use on employee work performance, as well as how firms prefer to erect barriers to guarantee that less time is spent on some of these platforms during work hours. Is it, however, beneficial to allow employees to use social networking platforms to increase work productivity?

### **Justification of Cyberloafing at Work Places**

According to Coker (2011), a tiny group of human resource researchers believe that employees using the internet for personal purposes at work is detrimental to their work performance. In fact, 34 percent of the 52 organizations studied have reprimanded or fired individuals as a result of WILB (Young and Case, 2004). However, Cyberloafing has a different view and perception among researchers who view it in a positive way. This group of researchers has coined new terms to make Cyberloafing sound better, such as "workplace internet leisure surfing." (Kim and Byrne, 2011; Mercado, Giordano and Dilchert, 2017; Koay and Soh, 2018), freedom to surf (Coker, 2011), a source of recovery (Ivarsson and Larsson, 2012). Workplace Internet leisure browsing is "an inconspicuous interruption that allows mental capacity to be restored and encourages sentiments of autonomy" (Coker, 2011).

Anandarajan and Simmers (2005) persisted that WILB has a greater role in achieving a balanced employee's personal life and their work. They highlighted that WILB is the only way that employees can reduce their stress and, above all, it is the perfect method of acquiring informal education. WILB is based on motivational theories that suggest WILB could improve employee performance (Coker, 2011). Anandarajan and Simmers, (2005) observed that internet access is a business tool, and in addition to that, it provides workers with access to the largest playground for growth of both workers and their organisations.

Cyberloafing relieves employees from the monotonous performance of their daily duties, which helps regulate employees' psychological mood and job-caused stress (Eastin et al., 2007; Khosrow-Pour, 2017). Cyberloafing acts as a break from the pile of employees' tasks and hence rejuvenates their work performance after their surfing on their favourite pages or applications (Beri and Anand, 2020).

Self-determination theory (SDT) recommends that the workplace's autonomy has positive results in motivating employees. The theory goes further, suggesting that employees who are monitored or restricted from accessing the internet have dire consequences for their motivation (Deci & Ryan, 2004). Any attempt to block or restrict employees' internet access is perceived by many workers as amputating their sense of self-control (Coker, 2011). Social information theory recommends that workers' behaviours are simply motivated by values, norms, and work environment expectations, which are contrary to depriving employees' autonomy (Quoquab et al., 2015).

### **Illegalisation of Cyberloafing at Workplaces**

Scholars who argue against Cyberloafing conceptualise it as a type of "workplace production deviance" (Lim, 2002; Lim and Teo, 2005). Beri and Anand (2020) contended that Cyberloafing ought to be stopped at any cost for the reason that it leads to time wastage, which is the organisation's paramount assertion. They concluded that organisations must be concerned about legal liabilities, internet congestion and above all, loss of productivity.

Chatting on social media (Facebook, WhatsApp, Twitter, TikTok, Instagram), online shopping (Lazada, Shopee, Tokopedia, Alibaba), job searching (LinkedIn), online dating (Tinder), gambling, surfing on live scores, stock exchanges, playing online games, and watching or downloading banned songs and pornography are all examples of cyberloafing. These behaviors have been fueled by the ease with which individuals may access the internet from their offices, which tends to entice them into Cyberloafing (Coker, 2011; Quoquab et al., 2015; Koay and Soh, 2018; Beri and Anand, 2020).

Half of all work-related activities are lost to employees' Cyberloafing (Greengard, 2000). Internet access has

been a threat rather than an opportunity in many organisations. In developing countries, for example, workers tend to do their own activities online rather than those of an organisation. It is normal for employees to busy themselves with their class assignments, searching for new jobs, arranging for their vacations, and following breaking news, among others. Apart from causing production losses, Cyberloafing has brought exposure to malware, rising costs of running internet access and security issues (McWilliams, G., & Stepanek, 1998; Conlin, 2000; Simmers, 2002).

Price, (2011) argues that Cyberloafing is injurious to employees' performance since it deprives them of their time, concentration, and energy to continue with their work. Cyberloafing causes tiresomeness and awkward feelings toward the job assigned (Shaddiq *et al.*, 2021). Apart from productivity decrement, Cyberloafing causes clogging of network bandwidths, a loose system operation and increased tendencies to cybercrimes (e.g. workers downloading banned music or visiting restricted sites) (Koay and Soh, 2018).

Personal usage of internet access, either for downloading or dealing with business is a good indicator of an organisation's inefficiency (Ramayah, 2010). Blanchard and Henle, (2008) put forward two forms of cyberloafing, namely, minor and serious cyberloafing. Minor cyberloafing involves visiting pornographic pages or channels, chit-chatting, blogging, betting, or downloading music or videos of any genre during working hours. Serious cyberloafing involves visiting pornographic pages or channels, chit-chatting, blogging, betting, or downloading music or videos of any genre. Mailing and chatting require workers' close attention and concentration, which ends up affecting their performances (Li and Chung, 2006). Any type of cyberloafing must be considered as international deviation behaviour or harmful behaviour towards organisation (Weatherbee, 2010).

Bizshift-trends have come up with jaw dropping information on cyberloafing in organisations.

#### **Antecedents of Cyberloafing**

With the increase of communication and technology, there is a great need to reassess the term Cyberloafing and its application at workplaces (Beri and Anand, 2020). Various scholars have tried to shed light on Cyberloafing at workplaces. However, the whole situation seems to be either causing a lot of troubles or employees are finding new ways to hide their Cyberloafing activities from their supervisors (Lim, 2002; Quoquab, Salam and Halimah, 2015; Shaddiq *et al.*, 2021). Therefore, Cyberloafing is explained with the aid of theories like self-determination theory, social information process theory, Social learning theory, and workplace internet leisure browsing (Bandura, 1979; Deci, E. L., & Ryan, 2004; Walther, 2008). The factors that show the reason for the persistence of Cyberloafing.

#### **Privacy Factors**

Employees have private lives that they like to keep secret to themselves through cyberloafing. Studies have shown that people with a lot of private issues are likely to engage in non-job-related activities to handle their issues during working hours (Shaddiq *et al.*, 2021). They also observed that introverts tend to need more privacy than extroverts, which makes them feign like they are involved in job-related activities while in reality they tend to be reorganising their private lives through cyberloafing (Weissenfeld, Abramova and Krasnova, 2019).

#### **Personal Habits and Belief Factors**

Cyberloafing becomes a habit for many employees through routine performances without the person's conscious energy and without seeing direct effects of their actions (Koay and Soh, 2018). A habit, once formed, becomes the person's lifestyle and affects one's behaviour, and an employee tends to cyber-loaf during time of work (Dmour, Bakar and Hamzah, 2020).

#### **Personality Factors**

Research shows clearly that young people, extroverts, men, and long-term internet users are the key cyber loafers during working hours rather than other individual traits and gender (Jia, Jia and Karau, 2013; Weissenfeld, Abramova and Krasnova, 2019). Andreassen, Torsheim, & Pallesen, (2014) revealed that personality characteristics like agreeableness have a negative association with cyberloafing and that there is a direct connection between consciousness and cyberloafing.

#### **Workplace-involved Factors**

The factors like nature of the job, an employee's characteristics as well as organisation-related issues may cause employees to cyber-loaf (Weissenfeld *et al.*, 2019). In most countries, internet bundles are sold expensively hence when a job offers free Wi-Fi connection employees tend to use their devices wisely to access the internet without recognising that they are Cyberloafing (Odom, 2017).

#### **Organisations and Their Policies**

Bigger organisations have higher numbers of lyber loafers whereas smaller organisations have reasonable numbers of cyberloafers. Organisations' policies on monitoring, controlling, or sanctions on internet access may be a cause of cyberloafers during working hours (Jia, Jia and Karau, 2013; Weissenfeld, Abramova and Krasnova, 2019).

### **3. METHODS**

This report is based on data from a survey of 250 Saudi Arabian employees from 20 different companies. A controlled experiment and interviews were carried out in order to collect and analyse data. A questionnaire addressing employees' internet use was distributed to participants, and it consisted of eight basic categories, while another questionnaire addressing employers' internet use policy and access restrictions consisted of five categories.

The core of the survey questions addressed the following areas:

- a. Internet access restrictions or the barring of services deemed unrelated to the job
- b. What websites are judged unsuitable for the job?
- c. Employee access to specific services is being monitored.
- d. Allowing employees to use the internet for personal reasons is a good idea.
- e. Do you consider the internet to be a major time-waster?
- f. Is the internet a good place to go for professional growth and other areas of work completion?
- g. Employees are reprimanded for violating the Internet Acceptable Use Policy.

The following questions are found in the five key categories aimed at addressing companies' Internet use policies and access restrictions to sites deemed irrelevant to the job:

- a. Time spent on the internet in hours
- b. The location and type of devices used to access the Internet
- c. For fun and games, I spend hours on the Internet.
- d. Internet activity of employees
- e. Acceptable Use Policy of the Employer
- f. The Impact of the Internet on the Workplace

The interviews with managers and employees were semi-structured, and the majority of them were conducted over the phone. Both managers and staff were subjected to screening in order to ensure their participation. The interview procedure included the specific mechanisms used to determine what a company considers to be an Internet fair use policy, as well as any penalties imposed by the company for any violations of the policy. It's worth noting that the researchers gathered data on employee roles from both views while keeping the information confidential from each party.

#### 4. RESULTS AND DISCUSSION

According to the findings of the poll, more than 90% of employers monitor internet

usage during working hours and place limits on websites deemed unrelated to the job. The findings also reveal three important aspects of employee behavior: 1) most employees use their mobile devices for social media while at work, 2) they use the company's computer to access shopping and news sites, and 3) they use the company's computer to access shopping and news sites. 3) They are unaffected by certain website limitations. Descriptive statistics were utilized to analyze the social media platform usage, as indicated in Figure 1, although a correlation matrix tends to highlight the diverse activities of the users.

The correlation matrix highlights five very important keys points which are:

- a. When it comes to social networking sites, there is a 0.903 correlation.
- b. When looking for news, there is a correlation of 0.883.
- c. The use of the Internet for educational purposes has a correlation of 0.726637.
- d. The majority of social networking activity are for news, according to a 0.935 correction.
- e. For music, file sharing is used, with a correction of 0.370.

The link of social networking sites and social networking activity is our main focus here. The data being analyzed is categorical, with a binary variable describing the impact of cyberloafing on employee productivity. As a result, logistic regression was used to analyze the data in this study. The variable "In general, how do you think the internet has affected you at work?" was noted in the employee survey. to be 0 if "The Internet has had no effect on my productivity" and 1 if "The Internet has increased my productivity."

$$\text{Logit}(Y1): \beta_0 + \beta_1 \text{Education} + \beta_2 \text{Gaming} + \beta_3 \text{FileSharing} + \beta_4 \text{Music} + \beta_5 \text{News} + \beta_6 \text{Shopping} + \beta_7 \text{SocialNetworking} + \beta_8 \text{WebBrowsing}$$

We can deduce from the preceding that  $0 = 5.29$  or  $\exp(0) = 198.3$  are the odds of someone spending 0 hours on the internet being more.

Figure 1. Descriptive Statistics

Description	Education	Gaming	File Sharing	Music	News	Shopping	Social Network	Browsing
Mean	2.944	2.86	2.944	2.56	3	3.112	3.108	3.004
Std. Error	0.09794	0.106	0.0884	0.0764	0.0971	0.0822	0.1088	0.1128
Median	3	3	3	3	3	3	3	3
Mode	1	1	4	3	5	3	5	5
Std. Deviation	1.548	1.676	1.3988	1.2084	1.5367	1.3000	1.7216	1.784
Sample Variance	2.398	2.811	1.9566	1.4602	2.3614	1.6902	2.9641	3.184
Kurtosis	-1.43	-1.68	-1.253	-1.007	-1.496	-0.945	-1.720	-1.79
Skewness	0.048	0.006	-0.130	0.2231	0.0334	-0.065	-0.016	0.075
Range	4	4	4	4	4	4	4	4
Minimum	1	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5	5

Source: Data Processed

Figure 2. Correlation Matrix

Category	Education	Gaming	File Sharing	Music	News	Shopping	Social Network	Browsing
Education	1							
Gaming	-0.59	1						
File Sharing	-0.75	0.289	1					
Music	0.407	-0.05	0.37	1				
News	0.777	-0.76	-0.35	0.233	1			
Shopping	0.050	0.263	0.149	0.115	-0.08	1		
Social Net.	0.755	-0.70	-0.27	0.329	0.933	0.03	1	
Browsing	0.726	-0.71	-0.11	0.438	0.883	-0.15	0.905	1

Source: Data Processed

Figure 3. Linear Regression Results for Shopping

	Coefficients				
	Estimate	Std. Error	t. value	Pr(> t )	
(Intercept)	2.69356	2.5217	10.682	<2e-16	***
FunPlay	0.09886	0.06093	1.622	0.106	
Education	0.09093	0.0079	1.496	0.136	

Source: Data Processed

Figure 3 demonstrates that  $b_1=0.09886$ , which means that increasing the number of hours spent on the internet for “fun/play” by one hour will increase the number of hours spent on “shopping” by 0.09886, which is not statistically significant.

$b_2=0.09093$ : Increasing the number of hours spent on the internet for “Education” by one hour increases the number of hours spent on “Shopping” by 0.09093.

The following are the results of fitting the linear regression for “Social Networking”:

$$\text{Social Networking: } \beta_0 + \beta_1 \text{FunPlay} + \beta_2 \text{Education}$$

So, for  $b_1=-0.15029$ : an increase of one hour spent on the internet for “fun/play” will greatly reduce the number of hours

spent on “Social Networking” by 0.15029, whilst  $b_2=0.76661$  will significantly raise the number of hours spent on “Social Networking” by 0.76661.

Figure 4. Linear Regression Results for Social Networking

	Coefficients				
	Estimate	Std. Error	t. value	Pr(> t )	
(Intercept)	1.08015	0.21670	4.985	1.17e-06	***
FunPlay	-0.15029	0.05236	-2.870	0.00446	**
Education	0.76661	0.05224	14.676	< 2e-16	***

Source: Data Processed

**Discussion**

The topmost goal of this paper is to scrutinise different cyberloafing activities that are dominant at workplaces with an emphasis on social media networking,

which in turn cause the fall of employees' performances. This review is not exhaustive, however, researchers have adopted a unique approach in analysing Cyberloafing persistence in organisations. The topic has been narrowed down to the corporate sector only, though we have encountered Cyberloafing among unorganised sectors too.

The traditional schedule, which requires employees to work eight-hours a day in five working days, requires workers to put their efforts with their discipline to accomplish a set of activities in a given time frame (Anandarajan and Simmers, 2005). Cyber Loafers interfere with the traditional working schedules without replacement of time wasted perusing on social media for their own benefits. Results are hardly met, many organisations are doing mark times on the same work output year-in, year-out because workers attend at workplaces only to deal with their online activities for about 50% of time allocated (Greengard, 2000).

The results show that an increase in productivity can be achieved if employees engage in activities that will add value to the job. In this case, 'Education' encompasses a broader perspective which allows self-improvement, knowledge acquiring and ideation which will add to the company's development. However, if the non-work-related activities include fun/play, there will be a significantly less reduction in the use of social media platforms but it also leads to less usage of working hours for purposes that are of value to employers. As such, in order to allow employees to be less active on social media platforms during working hours, there has to be a balance between working and leisure hours.

Allowing employees to participate in recreational activities is thought significant. According to the findings, people who spend zero hours on the internet are more productive. Employers who limit access to the Internet to "Social Networking" and "Web Browsing" will witness an increase in "Work/Educational" activities.

## 5. CONCLUSION

Cyberloafing has been this era's greatest drawback to employees' work performance. Through the comprehensive summary of cyberloafing factors, employees need education to break free from internet addiction for better performance at work. This study intends to minimise a gap that has been found in literature through combining all the antecedents on one table for human resources experts to find a way through employees' cyberloafing activities. This study suggests more studies to be conducted as to how to combat cyberloafing during this pandemic period where working from home has been emphasised. Although this study tends to emphasise the association between social media networks and work performance, it is not without flaws and hence has limits that need to be explored further in the future. The focus of the study is on Saudi Arabia, which only shows how employees there use their time at work. An empirical study of more countries can provide a broader viewpoint on how employees differ from one region to another.

## REFERENCES

- Anandarajan, M. and Simmers, C. A. (2005) 'Developing Human Capital through Personal Web Use in the Workplace: Mapping Employee Perceptions', *Communications of the Association for Information Systems*, 15(June). doi: 10.17705/1cais.01541.
- Andreassen, C. S., Torsheim, T. and Pallesen, S. (2014) 'Predictors of use of social network sites at work - a specific type of cyberloafing', *Journal of Computer-Mediated Communication*, 19(4), pp. 906-921. doi: 10.1111/jcc4.12085.
- Askew, K. et al. (2014) 'Explaining cyberloafing: The role of the theory of planned behavior', *Computers in Human Behavior*. Elsevier Ltd, 36, pp. 510-519. doi: 10.1016/j.chb.2014.04.006.



- Bandura, A. (1979) *Self-referent mechanisms in social learning theory*. *American Psychologist*.
- Beri, D. N. and Anand, S. (2020) 'Consequences Of Cyberloafing -A Literature Review', *European Journal of Molecular & Clinical Medicine*, 7(6), pp. 434-440. Available at: [https://ejmcm.com/article\\_2765.html%0Ahttps://ejmcm.com/pdf\\_2765\\_3f4fef0f1ec5406a78eb804746143442.html](https://ejmcm.com/article_2765.html%0Ahttps://ejmcm.com/pdf_2765_3f4fef0f1ec5406a78eb804746143442.html).
- 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), pp. 1067-1084. doi: 10.1016/j.chb.2007.03.008.
- Brocke, J. vom *et al.* (2009) 'Reconstructing the Giant : on the Importance of', *CIS 2009 Proceedings*, 372.
- C., S. and M, A. (2004) *Personal Web Usage in the Workplace: A Guide to Effective Human Resources Management*. London: British Cataloguing in Publication Dat. Available at: <http://libgen.li/ads.php?md5=546e3c49f36656c0d663860f043ead0b>.
- Canan, F. (2016) 'The relationship between internet addiction and eating disorders', *Eating and Weight Disorders*, 21(1), pp. 137-138. doi: 10.1007/s40519-015-0203-2.
- Chang, M. K. and Man Law, S. P. (2008) 'Factor structure for Young's Internet Addiction Test: A confirmatory study', *Computers in Human Behavior*, 24(6), pp. 2597-2619. doi: 10.1016/j.chb.2008.03.001.
- Coker, B. L. S. (2011) 'Freedom to surf: The positive effects of workplace Internet leisure browsing', *New Technology, Work and Employment*, 26(3), pp. 238-247. doi: 10.1111/j.1468-005X.2011.00272.x.
- Conlin, M. (2000) 'Workers, Surf at Your Own Risk.' *Business Week* 3685.
- D'Abate, C. P. (2005) 'Working hard or hardly working: A study of individuals engaging in personal business on the job', *Human Relations*, 58(8), pp. 1009-1032. doi: 10.1177/0018726705058501.
- Deci, E. L., & Ryan, R. (2004) *Handbook of self-determination research*. University Rochester Press.
- Dmour, M. M., Bakar, H. S. and Hamzah, M. R. (2020) 'An antecedent, consequences, and policies view of cyber loafing among students', *International Journal of Innovation, Creativity and Change*, 11(2), pp. 325-338.
- Eastin, M. S., Glynn, C. J. and Griffiths, R. P. (2007) 'Psychology of communication technology use in the workplace', *Cyberpsychology and Behavior*, 10(3), pp. 436-443. doi: 10.1089/cpb.2006.9935.
- Freimark, M. (2012) *The role of organizational citizenship behavior and organizational justice on intention to cyberloaf through a general deterrence theory lens*. Carbondale.: Southern Illinois University.
- Galletta, D. and Polak, P. (2003) 'An empirical investigation of antecedents of Internet abuse in the workplace', *Proceedings of the second annual workshop on HCI research in MIS*, (2002), p. 47. Available at: [http://www.sighci.org/icis03\\_wksp/hci03\\_program\\_proceedings.pdf#page=50](http://www.sighci.org/icis03_wksp/hci03_program_proceedings.pdf#page=50).
- Garrett, R. K. and Danziger, J. N. (2008) 'On cyberslacking: Workplace status and personal Internet use at work', *Cyberpsychology and Behavior*, 11(3), pp. 287-292. doi: 10.1089/cpb.2007.0146.

- Glassman, J., Prosch, M. and Shao, B. B. M. (2015) 'To monitor or Not to Monitor: Effectiveness of a Cyberloafing Countermeasure', *Information and Management*. Elsevier B.V., 52(2), pp. 170–182. doi: 10.1016/j.im.2014.08.001.
- Greengard, S. (2000) *The high cost of cyberslacking*.
- Guthrie, R. and Gray, P. (1996) 'Junk computing: Is it bad for an organization?', *Information Systems Management*, 13(1), pp. 23–28. doi: 10.1080/10580539608906968.
- Ivarsson, L. and Larsson, P. (2012) 'Personal activities on company time to make everyday life work'. Available at: <http://www.diva-portal.org/smash/get/diva2:533533/FULLTEXT01.pdf>.
- Jandaghi, G. et al. (2015) 'Cyberloafing Management in Organizations', *Iranian Journal of Management Studies*, 8(3), pp. 335–349. doi: 10.22059/ijms.2015.52634.
- Jia, H., Jia, R. and Karau, S. (2013) 'Cyberloafing and personality: The impact of the Big Five traits and workplace situational factors', *Journal of Leadership and Organizational Studies*, 20(3), pp. 358–365. doi: 10.1177/1548051813488208.
- Jones, G. R. (1984) 'Task Visibility, Free Riding, and Shirking: Explaining the Effect of Structure and Technology on Employee Behavior', *Academy of Management Review*, 9(4), pp. 684–695. doi: 10.5465/amr.1984.4277404.
- Kardefelt-Winther, D. (2014) 'A conceptual and methodological critique of internet addiction research: Towards a model of compensatory internet use', *Computers in Human Behavior*. Elsevier Ltd, 31(1), pp. 351–354. doi: 10.1016/j.chb.2013.10.059.
- Karimi Mazidi, A. et al. (2020) 'Cyberloafing in public sector of developing countries: job embeddedness as a context', *Personnel Review*. doi: 10.1108/PR-01-2020-0026.
- Khosrow-Pour, M. (ed.) (2017) *Encyclopedia of information science and technology*. 4th edn. Hershey PA: IGI Global. doi: 10.4018/978-1-5225-2255-3.ch374.
- Kidwell, R., Bennett, N. and Valentine, S. (2010) 'The limits of effort in understanding performance: What employees "do" and what might be done about it', *IEEE Engineering Management Review*, 38(4), pp. 62–75. doi: 10.1109/EMR.2010.5645757.
- Kim, S. J. and Byrne, S. (2011) 'Conceptualizing personal web usage in work contexts: A preliminary framework', *Computers in Human Behavior*. Elsevier Ltd, 27(6), pp. 2271–2283. doi: 10.1016/j.chb.2011.07.006.
- Koay, K.-Y. and Soh, P. C.-H. (2018) 'Does Cyberloafing Really Harm Employees' Work Performance?: An Overview', *Proceedings of the Twelfth International Conference on Management Science and Engineering Management*, p. 12. doi: [https://doi.org/10.1007/978-3-319-93351-1\\_71](https://doi.org/10.1007/978-3-319-93351-1_71).
- Landers, R. N. and Lounsbury, J. W. (2006) 'An investigation of Big Five and narrow personality traits in relation to Internet usage', *Computers in Human Behavior*, 22(2), pp. 283–293. doi: 10.1016/j.chb.2004.06.001.
- De Lara, P. Z. M., Tacoronte, D. V. and Ding, J. M. T. (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), pp. 450–467. doi: 10.1108/10662240610690052.

- Lee, O. K. D., Lim, K. H. and Wong, W. M. (2005) 'Why employees do non-work-related computing: An exploratory investigation through multiple theoretical perspectives', *Proceedings of the Annual Hawaii International Conference on System Sciences*, 00(C), p. 185. doi: 10.1109/hicss.2005.698.
- Li, S. M. and Chung, T. M. (2006) 'Internet function and Internet addictive behavior', *Computers in Human Behavior*, 22(6), pp. 1067-1071. doi: 10.1016/j.chb.2004.03.030.
- Liberman, B. et al. (2011) 'Employee job attitudes and organizational characteristics as predictors of cyberloafing', *Computers in Human Behavior*, 27(6), pp. 2192-2199. doi: 10.1016/j.chb.2011.06.015.
- Lim, V. K. G. (2002) 'The IT way of loafing on the job', *Journal of Organizational Behavior*, 23(5), pp. 675-694. Available at: <https://www.jstor.org/stable/4093671>.
- Lim, V. K. G. and Chen, D. J. Q. (2012) 'Cyberloafing at the workplace: Gain or drain on work?', *Behaviour and Information Technology*, 31(4), pp. 343-353. doi:10.1080/01449290903353054.
- Lim, V. K. G. and Teo, T. S. H. (2005) 'Prevalence, perceived seriousness, justification and regulation of cyberloafing in Singapore: An exploratory study', *Information and Management*, 42(8), pp. 1081-1093. doi: 10.1016/j.im.2004.12.002.
- McWilliams, G., & Stepanek, M. (1998) *Knowledge management: Taming the info monster*. Business Week, 3583.
- Mercado, B. K., Giordano, C. and Dilchert, S. (2017) 'A Meta-Analytic Investigation of Cyberloafing', *Career Development International*, p. 48. doi: 10.1108/CDI-08-2017-0142.
- Mills, J. E. et al. (2001) 'Cyberslacking!', (November), pp. 34-47.
- Odom, P. B. (2017) 'Investigation faculty of education students' cyberloafing behaviors in terms of various variables', *Turkish Online Journal of Educational Technology*, 16(1), pp. 72-82.
- Ozler, D.E., & Polat, G. (2012) 'Cyberloafing Phenomenon in Organizations: Determinants and Impacts', *International Journal of eBusiness and eGovernment Studies*, 4(2), pp. 1-15.
- Oosthuizen, A., Rabie, G. H. and De Beer, L. T. (2008) 'Investigating cyberloafing, organisational justice, work engagement and organisational trust of South African retail and manufacturing employees.', *SA Journal of Human Resource Management*, 16(1), pp. 1-11. doi: <https://doi.org/10.4102/sajhrm.v16i0.1001>.
- Pindek, S., Krajcevska, A. and Spector, P. E. (2018) 'Cyberloafing as a coping mechanism: Dealing with workplace boredom', *Computers in Human Behavior*. Elsevier Ltd, 86, pp. 147-152. doi: 10.1016/j.chb.2018.04.040.
- Price, H. O. (2011) 'Internet addiction', *Internet Addiction*, pp. 1-119. doi: 10.1177/0002764204270278.
- Quoquab, F., Salam, Z. A. and Halimah, S. (2015) 'Does cyberloafing boost employee productivity?', *2nd International Symposium on Technology Management and Emerging Technologies, ISTMET 2015 - Proceeding*, pp. 119-122. doi: 10.1109/ISTMET.2015.7359013.
- Ramayah, T. (2010) 'Personal web usage and work inefficiency', *Business Strategy Series*, 11(5), pp. 295-301. doi: 10.1108/17515631011080704.
- Robinson, S. L. and Bennett, R. J. (1995) 'a Typology of Deviant Workplace Behaviors: a Multidimensional Scaling Study.', *Academy of Management Journal*, 38(2), pp. 555-572. doi: 10.2307/256693.

- Sampat, B. and Basu, P. A. (2017) 'The disguised digital away of loafing', *The IUP Journal of Organizational Behavior*, 16(1), pp. 19-37.
- Shaddiq, S. et al. (2021) 'Antecedents and Consequences of Cyberloafing in Service Provider Industries: Industrial Revolution 4.0 and Society 5.0', *Journal of Asian Finance, Economics and Business*, 8(1), pp. 157-167. doi: 10.13106/jafeb.2021.vol8.no1.157.
- Sheikh, A., Atashgah, M. S. and Adibzadegan, M. (2015) 'The antecedents of cyberloafing: A case study in an Iranian copper industry', *Computers in Human Behavior*. Elsevier Ltd, 51(PA), pp. 172-179. doi: 10.1016/j.chb.2015.04.042.
- Simmers, C. A. (2002) 'Aligning internet usage with business priorities', *Communications of the ACM*, 45(1), pp. 71-74. doi: 10.1145/502269.502301.
- Stanton, J. M. et al. (2002) 'Development of a compact measure of job satisfaction: The abridged Job Descriptive Index', *Educational and Psychological Measurement*, 62(1), pp. 173-191. doi: 10.1177/001316440206200112.
- Ugrin, J. C., Pearson, J. M. and Odom, M. D. (2008) 'Cyber-Slacking: Self-Control, Prior Behavior And The Impact Of Deterrence Measures', *Review of Business Information Systems (RBIS)*, 12(1), pp. 75-88. doi: 10.19030/rbis.v12i1.4399.
- Umukoro, O. S. et al. (2019) 'Predictive role of personality on cyberloafing within the Nigerian civil service and the mediatory role of ethical climate', *Edorium Journal of Psychology*, 5, pp. 1-9. doi: 10.5348/100015P13OU2019RA.
- Urbaczewski, A. and Jessup, L. M. (2002) 'Does electronic monitoring of employee internet usage work?', *Communications of the ACM*, 45(1), pp. 80-83. doi: 10.1145/502269.502303.
- Verton, D. (2000) *Employers ok with e-surfing*. Computerworld.
- Vitak, J., Crouse, J. and Larose, R. (2011) 'Personal Internet use at work: Understanding cyberslacking', *Computers in Human Behavior*. Elsevier Ltd, 27(5), pp. 1751-1759. doi: 10.1016/j.chb.2011.03.002.
- Walther, J. B. (2008) *Social information processing theory. Engaging theories in interpersonal communication: Multiple perspectives*. Second. SAGE Publications. Available at: <https://books.google.co.id/books?id=u3pZDwAAQBAJ&dq=social+information+processing+theory&lr=>.
- Weatherbee, T. G. (2010) 'Counter-productive use of technology at work: Information & communications technologies and cyberdeviancy', *Human Resource Management Review*. Elsevier Inc., 20(1), pp. 35-44. doi: 10.1016/j.hrmr.2009.03.012.
- Weissenfeld, K., Abramova, O. and Krasnova, H. (2019) 'Antecedents for Cyberloafing - A Literature Review', *Wirtschaftsinformatik*, pp. 1687-1701.
- Whitty, M. T. and Carr, A. N. (2006) 'New rules in the workplace: Applying object-relations theory to explain problem Internet and email behaviour in the workplace', *Computers in Human Behavior*, 22(2), pp. 235-250. doi: 10.1016/j.chb.2004.06.005.
- Wyatt, K. and Phillips, J. G. (2005) *Internet Use and Misuse in the Workplace*. Canberra: Computer-Human Interaction Special Interest Group (CHISIG) of Australia.
- Yan, J. and Yang, J. (2014) 'Trait procrastination and compulsive Internet use as predictors of cyberloafing', *11th International Conference on Service Systems and Service Management, ICSSSM 2014 - Proceeding*, pp. 7-10. doi: 10.1109/ICSSSM.2014.6874119.

- Yaşar, S. and Yurdugül, H. (2013) 'The Investigation of Relation Between Cyberloafing Activities and Cyberloafing Behaviors in Higher Education', *Procedia-Social and Behavioral Sciences*, 83, pp. 600-604. doi: 10.1016/j.sbspro.2013.06.114.
- Young, K. S. (2004) 'Internet Addiction: A New Clinical Phenomenon and Its Consequences', *American Behavioral Scientist*, 48(4), p. 15. doi: 10.1177/0002764204270278.
- Young, K. S. and Case, C. J. (2004) 'Internet Abuse in the Workplace: New Trends in Risk Management', *Cyberpsychology and Behavior*, 7(1), pp. 105-111. doi: 10.1089/109493104322820174.
- Yusof, M. M. *et al.* (2019) 'Weeding out deviant workplace behaviour in downsized organizations: The role of emotional intelligence and job embeddedness', *Asian Journal of Business Research*, 9(3), pp. 115-144. doi: 10.14707/ajbr.190070.