A Review of Cyberloafing Predictors in Literature

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**ARTICLE DETAILS**

| History | ABSTRACT |
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| Revised format: May 2020 | Surfing the Internet for personal purposes during working hours is known as cyberloafing. Employers consider cyberloafing as a counterproductive behavior that causes productivity losses. Researchers, however, have demonstrated to find cyberloafing beneficial for the employees’ social and emotional needs. It is essential to investigate the causes of cyberloafing to predict the behavior and recommend the appropriate workplace Internet use policies in favor of employee productivity. This paper will provide the main tested cyberloafing predictors in the literature. This paper will provide academic information necessary for establishing future researches on cyberloafing. |
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1. Introduction

The Internet is a core tool in the workplace of the 21st century. The Internet facilitates new organizational activities, improves communication, and enhances productivity. However, the open-access of the Internet provides an opportunity for the employees to engage in non-work-related activities (Mashi & Salimon, 2016) and waste time at work (Betts, Setterstorm, Pearson, & Totty, 2014; Gökcearslan, Mumcu, Haslaman, & Cevik, 2016). Office workers may engage in checking, sending, and receiving e-mails, visiting entertainment and social media sites, web browsing, and online shopping (Baturay & Toker, 2015). The behavior of employees surfing the Internet for non-work purposes is referred to as cyberloafting (Aghaz & Sheikh, 2016; Liberman, Seidman, McKenna, & Buffardi, 2011; O’Neill, Hambley, & Bercovich, 2014; Restubog et al., 2011; Vitak, Crouse, & LaRose, 2011). Some researchers (e.g., Coker, 2011; König & Caner de la Guardia, 2013; Lim & Chen, 2012) have reported the advantages that employees have when taking small breaks in workplaces for Internet browsing. In some studies, employee productivity increased when the employer permitted the use of Internet browsing breaks in the workplace (Coker, 2013). Moreover, employees who engage in personal web usage may support behaviors to balance family/work requirements, improve career advancement, and enhance job skills (Anandarajan, Simmers, & D’Ovidio, 2011; König & Caner de la Guardia, 2013). Therefore, there is research to demonstrate that the time spent engaging in personal tasks might not be as harmful as it may seem initially.
It is essential to identify the causes of cyberloafing to understand this phenomenon and propose an appropriate solution to balance productivity and employee needs. A summary of the tested cyberloafing predictors in the literature would provide academic information necessary for establishing future researches on cyberloafing. This paper will consist of three sections. The first section includes identifying terms of cyberloafing in the literature. The second involves a discussion of the cyberloafing predictors along with results reported by the researchers and finally the conclusion and recommendations for future researches.

2. Cyberloafing Definitions in Literature
In the literature, cyberloafing describes a set of behaviors where an employee engages in electronic activities that his or her direct supervisor would not consider job-related (Askew, Buckner, Taing, Ilie, & Bauer, 2014). Lim (2002) identified cyberloafing as “voluntary acts of employees using their companies’ Internet access for non-work-related purposes during working hours”; and “a counterproductive work-place behavior resulting in production deviance” (p. 677). The other most used term ‘Cyberslacking’ is defined as the extension of typical counterproductive workplace behavior that involves distraction and putting off work to ‘surf the Internet’ for nonwork purposes (O’Neill et al., 2014). Lesser-used terms used to refer to the same phenomenon include internet deviance, cyberbludging, online loafing, internet abuse, problematic internet use, internet dependency, and internet addiction disorder (Kim & Byrne, 2011). Cyberloafing examples include browsing social networks, news, sports, Youtube, online gaming, and online shopping (Cinar & Karcioğlu, 2015).

Kim and Byrne (2011) created seven empirical terms to define Internet usage for non-work related activities at the workplace. The terms were personal web usage (PWU), cyberloafing, non-work-related computing (NWRC), Internet abuses, problematic Internet use (PIU), Internet addictions, and Internet addiction disorder (IAD) (Kim & Byrne, 2011). The results revealed that employees consider cyberloafing, PWU, and NWRC positive behaviors because they provide more flexibility for Internet users who feel happy and more productive (Kim & Byrne, 2011). Others perceived Internet abuse, PIU, Internet addiction, and IAD as negative behaviors that cause productivity losses, reduce bandwidth, and cause legal issues (Kim & Byrne, 2011). As a result, people have different attitudes toward different concepts and do not perceive PWU, NWRC, and cyberloafing as prohibited behaviors like Internet abuse, Internet addiction, PIU, and IAD.

Cyberloafing was described as a form of psychological withdrawal behavior, where employees escape mentally from the workplace (Cinar & Karcioğlu, 2015). Also, researchers consider cyberloafing work deviance behavior. Voluntary surfing the Internet means breaking the organizational norms (Cinar & Karcioğlu, 2015). Other terms like cyber deviance, Internet abuse, workplace internet leisure browsing, and junk computing describe nonwork-related use of the Internet (Cinar & Karcioğlu, 2015; Vitak et al., 2011). Organizations must identify unproductive behaviors to understand the relevant causes and develop fair and acceptable Internet use policies for employees (Strader, Simpson, & Clayton, 2009).

2.1. Predictors of Cyberloafing
Organizations encounter increasing global concern regarding the Internet use for personal purposes during working hours, which is known as cyberslacking or cyberloafing (Liberman et al., 2011). As a result, researchers from different cultures focused on investigating and exploring the causes of cyberloafing as a way to predict the behavior before it exists. Recognizing the predictors of cyberloafing will enable researchers to understand this counterproductive behavior, guide employers to utilize Internet use to their benefits, and increase employee development and productivity in the workplace. The most critical cyberloafing predictors in literature are:

2.2. Demographic Factors
Age, gender, and computer skills were predictors of cyberloafing behavior at the workplace (Baturay &
Toker, 2015). Chen and Nath (2016) considered gender and Internet skills as predictors of cyberloafing whereas Baturay and Toker (2015) reported that skilled men in using the Internet for cyberloafing were more than women and intermediate users in schools. Skilled employees who perform their job activities using the Internet would practice cyberloafing behavior (Betts et al., 2014).

Men spend more time than women in surfing the Internet (Ferreira & Esteves, 2016). Also, researchers noted that men and women have different purposes of Internet use; women use the Internet for social interaction while men use the Internet for entertainment (Lim & Nam, 2016). Men believe that cyberloafing time is a decisive action that enhances employees’ productivity (Lim & Chen, 2012; Messarra & Karkoulian, 2011; Restubog et al., 2011; Vitak et al., 2011). However, females in Iranian study exhibited higher cyberloafing compared to males (see Rahimnia & Mazidi, 2015). Therefore, it is incorrect to generalize that men cyberloaf more than women, especially in conservative societies.

Young male employees cyberloaf more than old male employees (Lim & Chen, 2012; Messarra & Karkoulian, 2011; Restubog et al., 2011; Vitak et al., 2011), because old people do not have computer skills in using the Internet (Chang, McAllister, & McCaslin, 2015). In the United States, young men exhibited cyberslacking more than young women (Vitak et al., 2011). Therefore, Age, gender, and computer skills are important predictors for employees’ cyberloafing.

2.3. Personality Traits
Researchers have examined the impact of the five personality traits (extraversion, openness, agreeableness, conscientiousness, emotional stability) on Internet addiction. Kim and Byrne (2011) identified Internet addiction as the loss of control over a tedious practice regardless of the negative outcomes. Servidio (2014) tested two hypotheses to investigate the risk factors for Internet addiction in a sample of Italian university students. The results revealed that the risk of Internet addiction increases with personality traits like extraversion, openness, and agreeableness (Servidio, 2014).

Moreover, Jia, Jia, & Karauin (2013) tested the relationship between the five personality factors and cyberloafing in a workplace that has an Internet usage policy. The results revealed that cyberloafing decreases when employees implement the Internet usage policy at work and they have personality traits like conscientiousness and emotional stability (Jia et al., 2013). The personality traits of employees are significant predictors for cyberloafing and Internet addiction.

2.4. Self-Control
Self-control is a human trait that can expect cyberloafing behavior among employees. People having low levels of self-control will engage in cyberloafing (Restubog et al., 2011). Procrastination and neuroticism can predict cyberloafing in the remote working environment (O’Neill et al., 2014). Remote employees with personality traits like agreeableness, conscientiousness, and honesty will exhibit low cyberloafing (O’Neill et al., 2014). The remote workplaces should hire people of high self-control to control the personal use of the Internet.

2.5. Level of Work Commitment
Employees committed to work will not browse the Internet during working hours (D’Abate, 2005; Paulsen, 2015). He, Zhu, and Zheng (2014) considered the job and personal resources were predictors of work commitment. Committed employees are proactive, productive, focused, adaptive to the changing work environment, have positive emotions toward their jobs, have good health, and create an environment that encourages work engagement (He et al., 2014). Employers need to improve the workplace environment to advance work commitment.

However, improper management of a workplace may result in a free time that encourages employees to waste their time in personal activities such as cyberloafing (Paulsen, 2015). Moreover, uncommitted employees will cyberloaf and resist performing their job activities (Paulsen, 2015). The level of
employee commitment at work depends on the organizational policy to minimize empty labor and promote the sense of work commitment.

Liberman et al. (2011) investigated six individual and organizational factors: job involvement, intrinsic involvement, managerial support for Internet use, a coworker’s perceived cyberloafing, attitude towards cyberloafing, and non-internet loafing. The results indicated that cyberloafing decreases with increasing job involvement and intrinsic involvement. However, cyberloafing increases with increasing managerial support for Internet use, a coworker’s perceived cyberloafing, attitude towards cyberloafing, and non-internet loafing (Liberman et al., 2011). Finally, employers should administer formal Internet usage policies and provide an active work environment to reduce cyberloafing.

2.6. Work/family Duties
Family duties and obligations may affect the behavior of employees using the Internet at work according to the work/family border theory (König & Caner de la Guardia, 2013). König and Caner de la Guardia (2013) stated that work/family border theory does not explain the Internet use at work for personal purposes. Employees engage in personal Internet activities at work to meet private demands and obligations even when the employer identifies the job with the restricted use of computers (D’Abate, 2005; König & Caner de la Guardia, 2013). Employers need to apply organizational policies and procedures that consider the employee’s personal lives and family duties.

2.7. Subjective Social Norms, Attitudes, Perceived Behavioral Control and Emotional Intentions
The theory of planned behavior (TPB) presented cyberloafing as a withdrawal behavior; why employees engage in cyberloafing when they are at rest. TPB indicates that subjective social norms, attitudes, and perceived behavioral control are predictors to practice a behavior (Askew et al., 2014). Employers can predict cyberloafing through subjective descriptive norms, cyberloafing attitudes, and perceived ability to hide cyberloafing (Askew et al., 2014).

Researchers implemented the TPB to demonstrate the motivations of cyberloafing in a case study of an Iranian company (Askew et al., 2014). The results supported the theoretical framework (Sheikh, Atashgah, & Adibzadegan, 2015). Employers may reduce the cyberloafing behavior by applying proper Internet usage policies, increasing the transparency of computer activities, and improving the organizational culture (Sheikh et al., 2015). Therefore, the TPB theory will support the identification of cyberloafing predictors.

Also, the theory of interpersonal behavior (TIB) focuses on predicting behaviors related to emotional intentions (Betts et al., 2014) that can be a cause of Internet misuse during working hours (Moody & Siponen, 2013). Moody and Siponen (2013) proposed a model to predict the behavior of personal uses of the Internet and tested the antecedents of attitude, social factors, affect habits and intentions. The model was successful in predicting the behavior of personal Internet usage (Moody & Siponen, 2013). Moody and Siponen (2013) concluded that organizations should identify the perceived benefits to encourage employees to reduce the personal use of the Internet. Therefore, the TIB theory explained the cyberloafing predictors.

3. Conclusion
The Internet is a basic business tool for any business, and business leaders need to accept that employees do surf the Internet for non-work-related activities during working hours. In literature, researchers described this behavior through different terms, but the most used term was cyberloafing. Demographic factors, the big five personality traits, self-control, level of work engagement, work/family duties, social norms, attitudes, perceived behavioral control, and emotional intentions were important predictors of cyberloafing. Employers are responsible for developing organizational policies and procedures for Internet use in the workplace to provide a safe, productive, and fair workplace environment for their employees. Future studies focusing on exploring other cyberloafing predictors will improve academic
literature.

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