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# Uncontrolled Workplace Breaks and Productivity

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# Walden University

College of Management and Technology

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#### Huda Mashal

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Walden University 2017

#### Abstract

Uncontrolled Workplace Breaks and Productivity

by

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MBA, German Jordanian University, 2010

MS, University of Jordan, 1998

BS, University of Jordan, 1995

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

Walden University

January 2017

#### Abstract

Behaviors that may waste time in the workplace, like surfing the Internet for personal purposes (cyberloafing) or smoking breaks, may be the root antecedent for poor productivity. The purpose of this correlational study was to examine whether there was a relationship between the independent variables: time spent cyberloafing and time in uncontrolled smoking breaks, and the dependent variable: employee productivity. Procedural justice theory was used to frame the study. The population consisted of 34 employees working in a multinational engineering company in Jordan who have official smoking policies, but not cyberloafing policies. Correlations and multiple regression were computed using a Cyberloafing Scale and time spent smoking (independent variables) and The Endicott Work Productivity Scale (dependent variable). The results of the correlations indicated no significant relationship between Internet surfing and employee productivity. Smoking breaks were not a significant source of wasted time during the workday (the subsample and frequency of engaging in smoking were low); therefore, smoking did not have an effect on productivity. The findings of this study support the theory that using the Internet at work does not affect employee productivity. These findings have implications for positive social change that are also supported by existing research. Employees who engage in personal Internet activities at work tend to meet private demands and obligations. This connectivity may help to facilitate work-life balance.

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## Dedication

To my beloved parents, the words cannot express my love, respect, and gratitude for everything you did and still do for me. This achievement is not mine; it is yours as well.

أمي و أبي الحبيبين، أنتما سبب وجودي، سبب نجاحي، سبب تقدمي في الحياة. أهديكما هذا الانجاز الذي لم يكتمل الله أو لا ثم دعاؤكما، جزاكما الله عني كل خير.

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#### Section 1: Foundation of the Study

The Internet has become a common technology that provides immediate communication, economy, and cost reduction for all modern workplaces (Contreras, de Oliveria, & Muller, 2012). However, it becomes problematic when employees surf the Internet for personal purposes, known as cyberloafing, such as online shopping, instant messaging, email checking, blogging, and watching movies during working hours (Baturay & Toker, 2015). In addition to unsanctioned Internet use, smoking breaks have been a major cause of low productivity, and smokers have health problems that can generate high healthcare costs and absenteeism (Yung, 2012). Many researchers have studied smoking behavior from a healthcare perspective through implementing indoor smoking bans and restrictions (Nagelhout et al., 2012). However, few have highlighted the wasted time during repeated smoking breaks on a daily basis and its impact on employee productivity (Yung, 2012).

#### **Background of the Problem**

Managers may encounter two distracting behaviors that influence the employee productivity: personal web usage and smoking. Organizations consider surfing the Internet for personal purposes and having many smoking breaks per day as main reasons for poor productivity (Askew et al., 2014; Cheng, Li, Zhai, & Smyth, 2014; Lim & Chen, 2012; Menzin et al., 2012). Countries, institutions, and different workplaces have adopted policies, regulations, and restrictions to control and monitor Internet use and smoking behaviors (Messarra & Karkoulian, 2011; Nagelhout et al., 2012; Shepherd & Klein, 2012). The purpose of this study was to estimate the time spent on Internet surfing and

during smoking breaks and to investigate whether these behaviors are positively or negatively affecting the employees' productivity.

#### **Problem Statement**

Organizations and individuals are facing productivity losses because of employees' engagement in counterproductive behaviors like Internet surfing (Gözü, Anandarajan, & Simmers, 2015) and smoking breaks (Ferreira & Esteves, 2016). Wasted time during smoking breaks (in an 8-hour day) can account for as much as 15.2% of the total productivity for the workday (Yung & Agyekum-Mesah, 2012). Also, employees spend about 60% to 80% of working time in cyberloafing or personal Internet surfing (Gözü et al., 2015) causing productivity losses. The general business problem was low productivity due to wasted time during uncontrolled breaks. The specific business problem was that the productivity of employees working in multinational engineering companies is being influenced by wasted time they spend on uncontrolled smoking and cyberloafing, Internet surfing breaks.

#### **Purpose Statement**

The purpose of this cross-sectional, nonexperimental, quantitative correlational study was to examine the influence of wasted time spent on Internet surfing and uncontrolled smoking breaks on the productivity of employees working in multinational engineering companies. There were two independent variables; the first was the time spent on Internet surfing, and the second was the time spent on uncontrolled smoking breaks. The dependent variable was employee productivity.

The target population consisted of employees working in a multinational engineering company in Amman, the capital of Jordan. Multinational companies have workplace policies and regulations that unify the practices among culturally diverse employees. Noncompliance with policies and regulations may cause managerial problems in organizations; therefore, multinationals presented a unique environment to study counterproductive cultural practices that span nations (e.g., wasted time at work, as well as practices related to cultures like smoking and Internet surfing). The implications for positive social change included the potential to help employees quit bad habits like smoking and reduce the health problems. Also, controlling the Internet surfing time would improve the employee productivity in the workplace, protect employees from Internet addiction, and would reduce physical problems.

#### **Nature of the Study**

For this study, I chose a quantitative approach because quantitative studies provided numerical data that is not biased, analyzed by using statistical methods, and can be generalized to a large population (e.g., Yoshikawa, Weisner, Kalil, & Way, 2013). The purpose of a quantitative study was to determine the time spent by employees on Internet surfing and during smoking breaks and their influence on employee productivity. The results of quantitative studies described numerical characteristics of a population that can be generalized to other similar populations. Also, quantitative studies provided reliable numerical data ready for statistical processing and interpretation (Yilmaz, 2013).

The qualitative approach was appropriate for phenomenological studies where the researcher collects data from people's experiences (Morse, 2015). The observations of a

qualitative researcher may have bias risks because of human interaction with participants (Yilmaz, 2013). The sample size of a qualitative research consists of a small group of people compared to a large sample size of quantitative researches. Also, a researcher should have interpersonal skills to conduct interviews or focus groups (Yilmaz, 2013). Furthermore, the mixed methods research was not appropriate because it needs extra time to collect and analyze quantitative and qualitative data (McKim, 2015).

The correlation design was in alignment with this study because it allowed examination the linear relationship among three variables. The purpose of correlation design was to predict the relationship between two predictor variables (Internet surfing time and smoking break time) and a dependent variable (employee productivity). Other designs like experimental and quasi-experimental were not appropriate for this research because they were used to investigate the cause and effect relationships among variables within a controlled environment (Walter, Dunsmuir, & Westbrook, 2015).

#### **Research Question**

#### **Central research question:**

What is the relationship between time spent on Internet surfing, uncontrolled smoking breaks, and employee productivity?

 $H_01$ : There is no relationship between Internet surfing and employee productivity.

 $H_a$ 1: There is a relationship between Internet surfing and employee productivity

 $H_02$ : There is no relationship between smoking breaks and employee productivity.

 $H_a2$ : There is a relationship between smoking breaks and employee productivity.

#### **Theoretical Framework**

For this study, my approach was through the lens of organizational justice, which represented the fairness level in the workplace and its impact on the employees' different behaviors (Ko & Hur, 2014). The researchers studied three types of organizational justice: distributive, interactional, and procedural justice that is the theoretical framework for this study (Ko & Hur, 2014). Thibaut and Walker (1975) introduced the procedural justice concept (Brebels, Cremer, & Dijke, 2014) but Lind and Tyler (1988) originally identified the concept. *Procedural justice* refers to individual's perception of fair decisions in establishing organizational policies and procedures that consider all perspectives and concerns (Loi, Lam, & Chan, 2012). *Distributive justice* refers to the employees' perceived fairness against the achieved outcomes, whereas *interactional justice* related to the human interaction between employers and employees (Öğüt, Şahin, & Demirsel, 2013).

When employees perceive injustice in the workplace, they tend to justify wasting their time in nonrelated activities like cyberloafing (Öğüt et al., 2013) or having unnecessary smoking breaks for smokers (Yung & Agyekum-Mesah, 2012). Many researchers used the procedural justice theory to explain and predict different individual and organizational behaviors. For example, Loi et al. (2012) examined the relationship between procedural justice and employee job insecurity. When employees feel secured, trusted, and valued by their organizations, they comply willingly with the organizational activities (Loi et al., 2012). The purpose of this study was to explain the influence of

procedural justice on employee's engagement into distracting behaviors like Internet surfing at work and unlimited smoking breaks.

#### **Operational Definitions**

Absenteeism: Absenteeism is the behavior of absent employees who have excessive sick leaves due to health problems (Bhojani, Tsai, Wendt, & Koller, 2014).

Cyberloafing or Cyberslacking: Cyberloafing is the employee's behavior of browsing the Internet, checking personal e-mails, playing games, and reading the news during the official working hours (Askew et al., 2014).

*Distributive justice:* Distributive justice is a dimension of organizational justice, and it refers to the fairness of resources distribution among employees from different levels (Ko & Hur, 2014).

*Interactional justice:* Interactional justice is a dimension of organizational justice, and it refers to the individual's perception of fair treatment by supervisors and decision makers (Ko & Hur, 2014).

Organizational justice: The organizational justice refers to the fairness in the workplace that consists of three types; distributive, procedural, and interactional (Ko & Hur, 2014).

*Presenteeism:* Presenteeism refers to the employee's behavior of attending work but not focusing on job-related activities. Instead, an employee engages in personal activities like surfing the Internet or checking personal email (Wan, Downey, & Stough, 2014).

*Procedural justice:* Procedural justice is the fairness perceived by individuals on the procedures and policies of an organization (Ko & Hur, 2014).

*Procrastination:* Procrastination refers to the employee's behavior of postponing, delaying, or putting off a task or decision during working hours (O'Neill, Hambley, & Bercovich, 2014).

### Assumptions, Limitations, and Delimitations

#### **Assumptions**

In scholarly research, assumptions are things out of control but essential to have a research problem (Leedy & Ormrod, 2013); therefore, few assumptions were essential to conducting this research. My first assumption was that all participants would respond to the questionnaire honestly. Second, I assumed that all employees understand the Internet use policies (e.g., Glassman, Prosch, & Shao, 2015) and indoor smoking bans (e.g., Nagelhout et al., 2012) of their company. The third assumption was that cyberloafing is a counterproductive behavior that causes employees' productivity losses.

#### Limitations

A research limitation can be defined as the potential weaknesses of the study (Leedy & Ormrod, 2013). A major weakness of the study may be the participants' answers, whether they were honest and accurate in their responses or not. Also, the questionnaire language was English; therefore, only employees in multinational companies were capable of answering. The sample size was moderate since participants came from one company that received the questionnaire.

#### **Delimitations**

The delimitations are the boundaries of the study (Leedy & Ormrod, 2013) and for my study, they consisted of the participants, the organization of interest, and geographical location. The participants included employees working in a multinational engineering company, and the sample size was expected to be around 50 to 70 participants. The organization was a multinational engineering consulting company located in Jordan and has regular communications via the Internet with other offices and clients in the Middle East. The company was located in Amman, the capital of Jordan, which represented a rapidly growing city in the area.

#### **Significance of the Study**

#### **Contribution to Business Practice**

Although employees depend on the workplace Internet to perform job activities, this approach can distract employees who spend hours surfing the Internet for personal purposes. This study revealed the time spent on cyberloafing and whether it had a positive or negative influence on employee productivity. Also, leaving the workplace for excessive smoking breaks may waste the work time and negatively influence employee productivity, or it may prove as a break that improves productivity.

Both behaviors exist in the modern workplaces, and deep study would help organizations identify the status of their employees. The results of this study would benefit organizations in understanding their employees' behaviors and evaluating whether cyberloafing and smoking breaks have a positive or negative consequence on

employee productivity. Fairness of organizational procedures would provide methods to control the Internet surfing time and improve the employee productivity in the workplace.

#### **Implications for Social Change**

This study would benefit the employers to achieve a healthy workplace environment for their employees. Indoor smoking bans would protect nonsmokers from exposure to secondhand smoke (SHS) (Verdonk-Kleinjan, Rijswijk, Vries, & Knibbe, 2013) and would reduce the healthcare bills. Controlling the smoking breaks in a workplace might encourage smokers to quit smoking. Also, managing cyberloafing would enhance the fairness among employees who would trust their employers' procedures.

#### A Review of the Professional and Academic Literature

#### Introduction

The purpose of this cross-sectional, nonexperimental, quantitative correlation study was to examine the influence of wasted time spent on Internet surfing and uncontrolled smoking breaks on the productivity of employees working in multinational companies. I investigated if there was any relationship between time spent on Internet surfing (cyberloafing), uncontrolled smoking breaks, and employee productivity. The two hypotheses (null and alternative) were:

 $H_01$ : There is no relationship between Internet surfing and employee productivity.

 $H_a$ 1: There is a relationship between Internet surfing and employee productivity

 $H_02$ : There is no relationship between smoking breaks and employee productivity.

 $H_a$  2: There is a relationship between smoking breaks and employee productivity.

Employee productivity is a key factor for successful organizations and effective management. Engaged employees invest their working time, adapt to the work environment, and are more productive (He, Zhu, & Zheng, 2014). However, organizations encounter two distracting behaviors that influence the employees' engagement at work negatively: personal web usage and smoking. Organizations consider surfing the Internet for personal purposes and having many smoking breaks per day as main reasons for poor productivity (Askew et al., 2014; Cheng, Li, Zhai, & Smyth, 2014; Lim & Chen, 2012; Menzin et al., 2012). The information of this section consisted of a detailed review of contemporary peer-reviewed literature that explains the Internet use and smoking behaviors in the workplace and their influence on the employee productivity.

#### **Search Strategy**

The first step in conducting this literature review was searching for peer-reviewed articles about Internet use in workplaces and smoking behavior among employees that were published after 2012. I located articles in databases such as ABI/INFORM Complete, Academic Search Complete, Emerald Management Journals, SAGE, Google Scholar, Dissertations and Theses at Walden University, and ProQuest Central. The keywords for database search included *personal use of the Internet, cyberloafing, cyberslacking, electronic use policies, Internet monitoring, procedural justice, fairness, personality, productivity loss, employee productivity, smoking, tobacco control, cigarette breaks, smoking cessation programs, workplace smoking, employee behaviors, absenteeism, and presenteeism. Table 1 consists of a summary of the total number of* 

references used in this doctoral study, a total number of references used in the literature review, peer reviewed references, references within the last 5 years, and percentages. The results were in compliance with the 85% rule.

Table 1

Detailed List of References

Description	Value
Total number of references used in this doctoral study	138
Total number of references within the last 5 years	118
Percentage of references within the last 5 years	86%
Total number of peer-reviewed references	126
Percentage of peer-reviewed references	91%
Total number of references used in the literature review	104
Number of literature review references within the last 5 years	89
Percentage of literature review references within the last 5 years	86%
Number of peer-reviewed references in the literature review	98
Percentage of peer-reviewed references in the literature review	94%

The second step was identifying the theoretical background. Many theories can explain the employee's behavior of abusing the workplace time. However, I considered the procedural justice theory in my investigation and estimated the productivity losses or gains due to employee's embracing uncontrolled breaks during work time.

#### **Theoretical Framework**

The theoretical framework that I used for this study was the procedural justice theory. Many researchers have explained cyberloafing through theories like neutralization theory (Cheng et al., 2014), theory of planned behavior (TPB; Askew et al., 2014), theory of interpersonal behavior (TIB;Betts, Setterstorm, Pearson, & Totty, 2014; Moody & Siponen, 2013), general deterrence theory (GDT; Lowry, Posey, Bennett, &Roberts, 2015; Ugrin & Pearson, 2013) and organizational justice theory (Restubog et al., 2011). The organizational justice theory was introduced to identify the fairness level in the workplace and its impact on the employees' different behaviors (Ko & Hur, 2014; Son & Park, 2016).

Researchers identified three types of organizational justice; distributive, procedural, and interactional (Öğüt et al., 2013). *Distributive justice* refers to the employees' perceived fairness against the achieved outcomes, whereas interactional justice related to the human interaction between employers and employees (Öğüt et al., 2013). *Procedural justice* refers to individual's perception of fair decisions in establishing organizational policies and procedures that consider all perspectives and concerns (Loi et al., 2012). Thibaut and Walker (1975) introduced the procedural justice concept (Brebels, et al., 2014) but Lind and Tyler (1988) originally identified the concept.

Gillet, Colombat, Michinov, Pronost, and Fouquereau (2013) examined the positive relationship between procedural justice and needed satisfaction which in turn had a positive influence on organizational identification and job performance. Ko and Hur

(2014) investigated how the procedural justice influences job satisfaction and turnover intentions. Brebels et al. (2014) studied the interaction of procedural justice with self-definition to predict organizational, interpersonal, and job/task oriented citizenship behavior. Also, Loi et al. (2012) examined the relationship between procedural justice and employee job insecurity. Consequently, many researchers used the procedural justice theory to explain and predict different individual and organizational behaviors.

When employees perceive injustice in the workplace, they tend to justify wasting their time in nonrelated activities like cyberloafing (Öğüt et al., 2013). Procedural and Interactional justices are negatively related to cyberloafing behavior (Restubog et al., 2011). When employees have high self-control, they will have a greater perception of organizational justice and will engage in less cyberloafing (Restubog et al., 2011).

Unjust employers will drive employees to engage in cyberloafing as a way to cop out or return justice (Askew et al., 2014; Kim et al., 2015; Öğüt et al., 2013). However, employees will respond to the fairness of Internet usage policies that provide the social justice theories such as distributive, procedural, and interactional guidelines (Grover, 2014; Henle et al., 2009). They responded positively to Internet usage policies designed according to justice principles and followed fair, transparent, equal, repeated policies with free access to information (Grover, 2014; Son & Park, 2016).

The procedural justice theory applies to personal Internet use at the workplace and smoking breaks because it facilitates employees' acceptance and commitment to organizational decisions through fair treatment that builds interpersonal trust and loyalty towards organizations (see Loi et al., 2012). Employees feel secured, trusted, and valued

when organizations have high levels of procedural justice (Loi et al., 2012) and therefore, comply with the organizational activities. Researchers (Brebels et al., 2014) have studied the influence of procedural justice on employee citizenship behavior. Also, there is a relationship between procedural justice and job insecurity, ethical leadership, and power distance orientation (Loi et al., 2012). The purpose of this study was to explain the influence of procedural justice on employee's engagement into distracting behaviors like personal Internet use and unlimited smoking breaks in the workplace.

#### **Internet Use in the Workplace**

The Internet is an essential tool for the post 2000 workplace. It facilitates modern organizational activities, improved communication, and enhanced productivity. However, it is a major source of wasting time at work (Betts et al., 2014; Gökcearslan, Mumcu, Haslaman, & Cevik. 2016); employees may engage in web browsing, online shopping, blogging, checking, sending, and receiving emails, and visiting entertainment sites (Baturay & Toker, 2015). The behavior of employees using the Internet for nonwork purposes is called *cyberloafing* or *cyberslacking* (Aghaz & Sheikh, 2016; Liberman, Seidman, McKenna, & Buffardi, 2011; O'Neill et al., 2014; Restubog et al., 2011; Vitak, Crouse, & LaRose, 2011).

Employees underestimate the time they spent while engaged in nonrelated activities at work such as Internet use. Ferreira and Esteves (2016) identified two concepts of time at work, the actual time and perceived time. The actual time is measured with a clock, whereas the perceived time is estimated by individual's internal clock (Ferreira & Esteves, 2016). Researchers explored the actual time and perceived time

among employees, and the results revealed that employees spend 63.81 minutes surfing the Internet per week based on eight working hours daily (Ferreira & Esteves, 2016). Employees spent more time in cyberloafing than they perceived; the individuals' motivations predict the perception of time among employees (Ferreira & Esteves, 2016).

Kim and Byrne (2011), in their study of Internet usage for personal purposes during working hours (cyberloafing), created definitions for seven empirical terms. The tested terms were: personal web usage (PWU), cyberloafing, nonwork-related computing (NWRC), Internet abuses, problematic Internet use (PIU), Internet addictions and Internet addiction disorder (IAD) (Kim & Byrne, 2011). The results revealed that employees perceive cyberloafing, PWU, and NWRC positively because they allow for more freedom for Internet users who become happy and more productive (Kim & Byrne, 2011). Others perceive Internet abuse, PIU, Internet addiction, and IAD as negative behaviors that cause productivity losses, reduced bandwidth, and legal issues (Kim & Byrne, 2011). As a result, people have different attitudes toward different concepts and do not perceive PWU, NWRC, and cyberloafing as negative or forbidden acts like Internet abuse, Internet addiction, PIU, and IAD.

Predictors of cyberloafing. Identifying the predictors of counterproductive behaviors will help researchers understand cyberloafing behavior. Liberman et al. (2011) investigated six individual and organizational factors: job involvement, intrinsic involvement, managerial support for Internet use, coworker's perceived cyberloafing, attitude towards cyberloafing, and noninternet loafing. The results revealed that job involvement and intrinsic involvement have a negative relationship with cyberloafing

whereas managerial support for Internet use, coworker's perceived cyberloafing, attitude towards cyberloafing, and noninternet loafing were positively related to cyberloafing (Liberman et al., 2011). Essentially, employers need to establish an organizational environment that promotes job involvement, intrinsic involvement, and to implement formal Internet usage policies to reduce employee's engagement in cyberloafing.

Theory of interpersonal behavior. The TIB focuses on predicting behaviors related to emotional intentions (Betts et al., 2014) that can be a predictor of why do employees use the Internet for personal purposes during working hours (Moody & Siponen, 2013). Moody and Siponen (2013) constructed a model that predicts the behavior of personal uses of the Internet and tested the antecedents of attitude, social factors, affects, habits and intentions. The benefits and penalties of using the Internet for personal purposes were significant predictors, and the model was beneficial in predicting the behavior of personal Internet usage (Moody & Siponen, 2013). In their study, Moody and Siponen (2013) concluded that organizations should motivate employees to reduce the personal use of the Internet by identifying the perceived benefits, emotions, and habits for employees. Therefore, the TIB theory provided an explanation for cyberloafing predictors.

Theory of planned behavior. The TPB explained 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 antecedents of intentions to embrace a behavior (Askew et al., 2014). Employers can predict

cyberloafing by three predictors: subjective descriptive norms, cyberloafing attitudes, and perceived ability to hide cyberloafing (Askew et al., 2014).

In one case study of an Iranian company, researchers verified the motivations of cyberloafing by implementing the TPB (Askew et al., 2014). The results were significant and supportive for the implemented theoretical framework (Sheikh, Atashgah, & Adibzadegan, 2015). Top management personnel may reduce the cyberloafing behavior by applying clear Internet usage policies, increasing the transparency of computer activities, and improve the organizational culture (Sheikh et al., 2015). Therefore, TPB theory is appropriate to use for identifying cyberloafing predictors.

Engagement. The behavior of employees browsing the Internet during working hours indicated a lack of employee engagement or resistance to work (D'Abate, 2005; Paulsen, 2015). Job and personal resources were predictors of work engagement (He et al., 2014). Engaged employees are proactive, more productive, more 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). Organizations need to promote work engagement by improving the work environment.

However, workplace misbehavior may cause a great amount of empty labor that motivates employees to spend their time in private activities such as cyberloafing (Paulsen, 2015). Also, employees having a weak sense of work commitment will cyberloaf and resist doing their work (Paulsen, 2015). Poor organizational practices to reduce empty labor and employees lacking the sense of work commitment will influence the level of employee engagement at work.

Work/family. Employees may engage in Internet use for personal purposes at work to manage family duties based on the work/family border theory purposes (König & Caner de la Guardia, 2013). Researchers investigated many hypotheses and stated that work/family border theory has a limited perspective for explaining the Internet use at work for personal purposes (König & Caner de la Guardia, 2013). 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). Consequently, employers need to consider the employee's personal lives and family duties when designing fair organizational procedures.

Demographic factors and personal traits. Demographic factors, such as gender, age, and computer skill level, were main predictors of cyberloafing behavior at the workplace (Baturay & Toker, 2015). Gender and Internet skill level are predictors of cyberloafing (Chen & Nath, 2016, Lim & Chen, 2012); males and Internet experts engaged in cyberloafing more than females and intermediate users in schools (Baturay & Toker, 2015). Young men who are highly educated are more likely to practice cyberslacking (Messarra & Karkoulian, 2011; Restubog et al., 2011; Vitak et al., 2011). Women are less likely to engage in Internet surfing compared to men who spend more time in cyberloafing (Ferreira & Esteves, 2016). Therefore, employees who are males, young, and have computer skills will cyberloaf.

Old employees engaged less in cyberloafing, but men are more likely to cyberloafing (Lim & Chen, 2012). Elders lack computer skills and experience of using

the Internet (Chang, McAllister, & McCaslin, 2015). Also, skilled employees who spend time using the Internet for job activities are more likely to engage in cyberloafing behavior and to justify their cyberloafing behavior (Betts et al., 2014). Age, gender, and computer skills are significant indicators for cyberloafing among employees.

Organizations encounter growing concern related to the use of the Internet for personal purposes during work hours and known as *cyberslacking* or *cyberloafing* (Liberman et al., 2011). Young men workers conducted cyberslacking behavior more than young women workers in America (Vitak et al., 2011). Also, the daily Internet use at work and higher perceived Internet utility were positive predictors of cyberslacking frequency (Vitak et al., 2011). Researchers noticed that men use the Internet for gaming and entertainment whereas women use the Internet for informational purposes and social interaction (Lim & Nam, 2016). Gender is a major factor in predicting cyberloafing among employees.

Other researchers (Lim & Chen, 2012) investigated the relationship between cyberloafing, employees' emotions at work, and the different behavior among men and women. Usually, men engage in cyberloafing more than women and will consider the cyberloafing time a positive behavior that increases productivity among employees (Lim & Chen, 2012; Messarra & Karkoulian, 2011; Restubog et al., 2011; Vitak et al., 2011). However, the results of a study in Iran conflicted with all previous findings and revealed that females engage in cyberloafing more than males (see Rahimnia & Mazidi, 2015). Therefore, it is not a rule of thumb that men cyberloaf more than women especially in conservative societies like Iran.

Researchers have also investigated the relationship between the demographic variables, five personality traits, and the Internet addiction. Internet addiction is the loss of control over a repetitive habit despite the negative consequences (Kim & Byrne, 2011). Servidio (2014) proposed two hypotheses to examine the risk factors for Internet addiction, and the results revealed that demographic variables, student's Internet usage and personality traits such as extroversion, openness, and agreeableness would increase the risk of Internet addiction (Servidio, 2014). Furthermore, there is a negative relationship between conscientiousness, emotional stability, and applying an Internet usage policy at work and a positive relationship between extroversion and cyberloafing (Jia, Jia, & Karauin, 2013). The personality traits of employees are predictors for cyberloafing and Internet addiction.

The self-control is a human characteristic that can predict cyberloafing behavior among employees. People with low levels of self-control will be involved in cyberloafing act (Restubog et al., 2011). In the remote working environment, cyberloafing can be predicted by behaviors like procrastination and neuroticism (O'Neill et al., 2014). However, hiring employees with personality traits such as agreeableness, conscientiousness, and honesty will reduce cyberloafing among remote workers (O'Neill et al., 2014). The remote workplaces require employees of high self-control to manage their personal use of Internet.

**Employee productivity and presenteeism.** Although the Internet use in businesses facilitates communication and removes the constraints of time and space

(Kim, Triana, Chung, & OH, 2015), it creates insecurity, uncertainty, and increased risk of productivity losses (Askew et al., 2014; Contreras et al., 2012; Shepherd & Klein, 2012). Therefore, companies need to organize and control the Internet use to avoid Internet abuse and to guarantee the organizational efficiency. Researchers noticed that employees comply with Internet navigation controls to increase productivity, men and women accept punishment against Internet misuse, and they were willing to work outside office hours (Contreras et al., 2012).

The personal use of Internet may decrease employee productivity, consume the bandwidth, threaten the corporate security, and will increase the risk of e-viruses, spamware, and worms (Cheng et al., 2014; Kim et al., 2015). Cheng et al. (2014) tested the relationship between the intention to use the Internet at work for personal purposes through four theories that explain the causes of cyberloafing. The four tested theories were: neutralization theory, perceived sanction severity, perceived detection certainty, and perceived benefits. The results revealed that the effect of neutralization and perceived benefits are stronger than perceived detection certainty; as a result, employees perceived neutralization and benefits more than costs (Cheng et al., 2014).

Presenteeism is the act of attending work, but not performing effectively on the job because of engaging in personal activities like surfing the Internet or checking personal email (Cocker, Martin, & Sanderson, 2012). Nonwork-related presenteeism has a relationship with four psychological variables: emotional intelligence (EI), job stress, boredom, and procrastination. Wan et al. (2014) investigated the relationship between nonwork presenteeism and the four psychological variables. The results revealed that a

negative relationship exists between nonwork-related presenteeism and EI, positive relationships between boredom, procrastination and nonwork-related presenteeism (Wan et al., 2014). Therefore, presenteeism may cause cyberloafing due to boredom and procrastination.

Personal cell phones. The innovation of personal mobile devices like cell phones, smartphones, and tablets facilitated the Internet access for everyone. People become able to use social media and surf the Internet anytime and anywhere without restrictions (Ciochetto, 2015). As a result, businesses may consider this technology as beneficial for work development (Yueh, Lu, & Lin, 2016) or problematic behavior that should be controlled.

The widespread of personal mobile devices will encourage employees to cyberloaf away from the employer's monitoring procedures. Jamaluddin, Ahmad, Alias, and Simun (2015) investigated the predictors of using personal mobile devices for cyberloafing among Malaysian employees. The results revealed that employees who have the habit of using personal mobile devices and have an external locus of control- external factors controlling their behaviors- will engage in cyberloafing of personal mobile devices (Jamaluddin et al., 2015; Ozler, & Polat, 2012). As a result, habitual mobile phone use may become an addiction that causes excessive time spent on smartphones, losing temper, problematic interpersonal relationships, and social problems (Lee, Chang, Lin, & Cheng, 2014).

However, increasing the organizational restrictions will not reduce smartphone addiction (Chen & Nath, 2016). Stephens (2016) summarized the consequences of

implementing a restricted organizational policy on using mobile devices by nonmanagerial employees. The results indicated that productivity decreased, professional mobility decreased, increased tasks on supervisors, and fleeting organizational identification (Stephens, 2016). Therefore, organizational policies should adapt to the new technology of mobile devices.

Individuals at work will send and receive text and instant messages through their cell phones, and this will cause repeated interruptions (Lebbon & Sigurjunsson, 2016). The frequent distraction of cell phones and other mobile devices (McBride, 2015) will reduce employee productivity (Lebbon & Sigurjunsson, 2016). Employees working in critical jobs in the healthcare sector may encounter higher risks of using their cell phones and smartphones at work (McBride, 2015). It is recommended to control the use of mobile devices instead of restricting their use.

Workers using social media may get interrupted about 40% of the work time causing low task performance (Brooks, 2015). Brooks (2015) explored the influence of personal social media use on the individual's performance and well-being. The results verified that low task performance, low efficiency, high technostress and low happiness were related to excessive use of personal social media at work (Brooks, 2015).

Organizations need to reduce the distraction caused by using social media at work.

However, the use of personal smartphones will increase employee productivity and engagement by staying connected (MacCormick et al., 2012). MacCormick et al. (2012) explained that the dynamic connecting employees use their smartphones efficiently because they manage the duration and intensity of their mobiles. Dynamic

connectors are proactive, collaborative, cooperative, responsive, and engaged to work at critical times (MacCormick et al., 2012). Many companies improved the flexibility of workflow by implementing mobile technology in the workplace (Chung, Lee, & Kim, 2014). The expansion of smartphone technology is increasing, and organizations need to consider the benefits of using smartphones to perform work efficiently.

Researchers reported that the benefits of using mobile devices in businesses would improve workflow and communication among employees and clients. Yueh et al. (2016) investigated the influence of using mobile technology on employee attitude, behavior, and performance. The results revealed that a positive relationship existed between using mobile technology and improving work performance. (Yueh et al., 2016). Therefore, organizational policies facilitating the use of mobile technology in the workplace will improve the work performance.

Monitoring and controlling policies. Many organizations adopted electronic use policies based on procedural justice theory that refers to the perceived fairness of the procedures and policies (Henle et al., 2009). The electronic use policies will reduce the employee's abuse of Internet system and will increase productivity (Contreras et al., 2012). Organizations that design their policies to include progressive discipline or zero tolerance and appeals to peers or management will have employees who perceive these policies as fair (Henle et al., 2009). Organizational policies based on procedural justice theory will provide equal, fair, and acceptable procedures among employees.

The general deterrence theory (GDT) suggests that potential punishment can influence employee's action to reduce deviant behaviors (Cheng et al., 2014). GDT was

the basis of the organizational policies that employees follow under threat of sanctions (Cheng et al., 2014; Ugrin & Pearson, 2013). The individual threats terminate effective deterrents against personal use of the Internet, and Internet monitoring was ineffective in reducing behaviors like personal emailing and social networking (Ugrin & Pearson, 2013). Serious punishment in the regulations will reduce employees' intentions to cyber loaf in the workplace (Hassan, Reza, & Farkhad, 2015). Therefore, organizational policies based on GDT theory will not reduce cyberloafing.

Organizations may control the Internet use for personal purposes during working hours (cyberslacking behavior) by implementing four Internet monitoring policies (Messarra & Karkoulian, 2011). The four policies are (a) prohibiting the internet for personal use, (b) monitoring website access, (c) restricting hours of access, and (d) free Internet access (Messarra & Karkoulian, 2011). Implementing prohibiting Internet policies result in low job satisfaction and low productivity, whereas implementing the free Internet access policy increased the cyberslacking (Messarra & Karkoulian, 2011). Moderate and monitored use of Internet at work will improve employee productivity and reduce cyberslacking.

As a result, organizations implement acceptable use policies (AUP) and technical tools to reduce and control the Internet abuse without affecting the employee satisfaction (Contreras et al., 2012; Shepherd & Klein, 2012). The nonintrusive reinforcement was efficient in reducing the employee Internet abuse, and the number of Internet use for personal purposes decreased (Shepherd & Klein, 2012; Shepherd & Mejias, 2016).

Employees will perceive the benefits of complying with organizational Internet use policies.

Other researchers have investigated the effectiveness of installing an Internet filtering and monitoring systems to reduce the cyberloafing behavior in the workplace (Glassman et al., 2015). Glassman et al. (2015) adopted the agency theory to explain the relationship between the employer (principal) and the employee (agent) when both do not share the same goal because the employer does not provide complete information to the employee. The results revealed that the agency conflict between the employees and the management was the cause of the cyberloafing problem (Glassman et al., 2015).

Furthermore, using Internet filtering software, the electronic monitoring, and Internet policies will reduce employee cyberloafing (Glassman et al., 2015; Wang, Tian, & Shen, 2013). When employers provide clear regulations and policies for Internet use among employees, both will share common organizational goals and avoid cyberloafing.

Companies that follow policies prohibiting Internet use during work hours will encounter low productivity among employees (Askew et al., 2014). Work policies that promote resource nourishment showed effective performance and high levels of concentration during mental tasks (Bucciol, Houser, & Piovesan, 2013). *Time banditry*, defined as the engagement of employees in unethical nonwork activities, is a new construct that requires further investigations and measuring tools (Brock, Martin, & Buckley, 2013). Brock et al. (2013) developed and identified classic, technology, and social time banditry and those three dimensions will enable organizations to manage

unexpected counterproductive behaviors. The recommendation of organizations is to investigate this subject for future research studies (Brock et al., 2013).

Cyberloafing and organizational culture. Organizations may accept cyberloafing as a cultural norm (D'Abate, 2005). Cyberloafing becomes a standard operating procedure in the workplace when employees misinterpret the managerial support through unclear Internet use policy (Liberman et al., 2011). Askew (2014) identified cyberloafing as a descriptive norm that occurs when coworkers and supervisors cyberloaf. However, employee empowerment and providing corporate policy for Internet usage were important to reduce cyberloafing (Glassman et al., 2015; Kim et al., 2015). When organizations develop and implement clear Internet use policies, cyberloafing will be minimal.

Benefits of cyberloafing. Employers consider the personal web usage (PWU) a negative behavior because it causes productivity losses, whereas employees consider PWU a positive behavior (Coker, 2011; Coker, 2013; Grover, 2013). Actually, PWU positively benefits both the employer and employees (Anandarajan, Simmers, & D'Ovidio, 2011). Employees who engage in PWU will adapt to family/work requirements, support career advancement, and build job skills (Anandarajan et al., 2011; König & Caner de la Guardia, 2013). Organizations should not overlook or underestimate the benefits of cyberloafing.

Organizations consider surfing the Internet a waste of working time, whereas others accept it when implemented according to corporate Internet policies (Coker, 2011; Coker, 2013). Zoghbi (2012) argued that the type of organization will reveal whether the

cyberloafing activities are counterproductive behaviors or not. Cyberloafing can be a virtual activity that provides high-quality service in organizations; therefore, employers should design strategies to reduce the negative impact of cyberloafing (Zoghbi, 2012). Employers can achieve a healthy cyberloafing by establishing and implementing appropriate Internet use policies that fit the organization type.

However, some managers overlook the physical and psychological benefits of work breaks and their positive influence on employees' productivity. Internet browsing reduces stress, provides informal learning method, and encourages better time management (Coker, 2011). Also, the implementation of booster break programs in the workplace will reduce stress, increase health awareness and enhance the workplace social interactions (Taylor et al., 2013). Work breaks like Internet browsing breaks are beneficial for employees and employers.

Furthermore, personal Internet use may contribute positively to the work environment if directed toward increasing knowledge, skill, and creativity (Coker, 2011; Coker, 2013; Jian, 2013). The job characteristics will affect the personal online communication (POC). Researchers (e.g., Jian, 2013) indicated that employees who work in teams were less likely to engage in POC at work compared to employees who work individually. Also, employees with higher knowledge intensive jobs were more likely to engage in POC at work (Jian, 2013). Individual creative employees will benefit from POC unlike employees in teams.

Recent researchers (Coker, 2011; König & Caner de la Guardia, 2013; Lim & Chen, 2012) noticed the benefits of having small breaks in workplaces for Internet

browsing by employees. The employee productivity increased when the employer admitted the use of Internet browsing breaks in the workplace (Coker, 2013). Also, young employees, who used the Internet at an early age, participated in workplace Internet leisure browsing and considered this act as part of productivity improvement (Coker, 2013). The advantages of Internet browsing breaks exceed the disadvantages; therefore, employee productivity will increase.

# **Smoking Breaks at Workplace**

Smoking is a habitual behavior that causes health problems, social costs, and economic costs by increasing the direct medical costs of treating smoking-related diseases (Adams, Bose, & Rustichini, 2014; Grill & Voigt, 2016; Prochaska, Shi, & Rogers, 2013; Yuda, 2011). Also, smoking employees are less productive than nonsmoking because they have more sick leaves and spend many small cigarette breaks during working hours (Stolz et al., 2013; Yuda, 2011). Although countries, governments, and organizations have adopted smoking cessation programs (Uang, Hiilamo, & Glantz, 2016) to reduce the number of smokers, poor implementation of such programs will increase the threat of passive smoking or exposure to secondhand smoke (SHS) for nonsmokers (Kouvonen et al., 2012; Lazarus, Zlatev, Rodafinos, & Eiser, 2012; Nagelhout et al., 2012). Also, researchers have not evaluated the time of smoking breaks outside the workplace and their influence on employee's productivity (Yung & Agyekum-Mesah, 2012). It is recommended to evaluate the indirect cost of time losses during smoking breaks in addition to health costs.

**Demographic factors.** Researchers (e.g., Lazarus et al., 2012; Nagelhout et al., 2012) have investigated the demographic factors of smokers who comply with smoke-free policies. Lazarus et al. (2012) encountered that old employees were less likely to quit smoking than young because they have little knowledge about the SHS exposure on health. Also, employed smokers were more likely to quit smoking than unemployed because they perceive the health risks of smoking (Nagelhout et al., 2012). The age and employment status will influence the smoking quit rates among smokers.

The investigations revealed that old employees in Greece and females in Bulgaria had violated the smoking restrictions at work (Lazarus et al., 2012). Older employees in both countries exhibited annoyance from SHS as predictors of nonsmoker assertiveness (Kehlet, Schroeder, & Tonnesen, 2015; Lazarus et al., 2012). Nagelhout et al. (2012) connected the attempt to quit smoking with the educational level and the heaviness of smoking index (HIS). Employees with high HIS indexes are less successful in quitting attempt than moderate-heavy smokers (Nagelhout et al., 2012). As a result, old, unemployed, low educated and heavy smokers shall resist the smoking cessation policies and will not comply with smoke-free workplace legislations (Kehlet et al., 2015).

In the United States, the National Health Interview Survey results indicated smoking decline among U.S. employees (Syamlal, Mazurek, Hendricks, & Jamal, 2015). The reduction of cigarette smoking was significant among educated employees (Regidor et al., 2015), whereas low income and low-educated employees were less likely to quit smoking (Liu et al., 2015; Syamlal et al., 2015). In the period 1993-2012, Regidor et al. (2015) examined the influence of tobacco prices and the implementation of smoke-free

legislation on the smoking cessation programs by the educational level. The rise in tobacco prices was related to high quit ratios among women having low educational levels (Regidor et al., 2015). High tobacco prices will force smokers to quit smoking.

The highest rates of smoking in the United States were among unemployed Mexicans, Puerto Ricans, and Cubans (Blanco et al., 2014). Blanco et al. (2014) examined the smoking behavior among the three groups of Latino nationalities during two decades. The results revealed a significant decrease in former and current smoking Mexican and Cuban women but not for Puerto Rican. Also, the mean number of daily cigarettes consumption by Latino national women and men decreased over time (Blanco et al., 2014). The long-term national trends in Latino smoking behaviors will help policymakers, public health officials, and community workers, to address tobacco-related issues.

Social culture. Culture has a great role in identifying whether the smoking behavior is socially accepted or not (Christopoulou & Lillard, 2015). In China, cigarette gifting and sharing are customs that have strong cultural roots in promoting smoking as an acceptable social norm (Rich & Xiao, 2012). The Chinese government and companies had adopted initiatives to promote smoking quit programs, reduce the social tobacco use, and reduce the practice of exchanging cigarettes as gifts (Rich & Xiao, 2012). As a result, the current tobacco control efforts will minimize cigarette gifting practice in China.

Also, most of the Chinese male smokers have low education, low income, and low job that contribute to long periods of smoking (Guo & Sa, 2015). Guo and Sa (2015) investigated the socioeconomic factors influencing the smoking duration. The results

indicated that in China the influence of social smoking is greater than the influence of education and unlike to Western countries (Guo & Sa, 2015). When smoking is an acceptable social habit, smoking guit attempts will be difficult.

The gender differences in smoking cessation are still vague. The prevalence of smoking in Western countries is similar among men and women (Smith et al., 2015) but in Taiwan, smoking is a normal behavior for men and a social shame for women (Yang et al., 2016). Wu et al. (2015) examined the gender differences in long-term smoking abstinence rates at a smoking cessation clinic in Taiwan. The results revealed that women had lower smoking quit rates than men due to the social stigma for women to access treatment programs (Wu et al., 2015). Therefore, providing cessation programs that maintain some anonymity for smokers may help women to quit smoking privately.

Burgess et al. (2014) explored the tobacco use practice among Southeast Asians living in the United States related tobacco use to social status, respect, and social rituals among adult men (Burgess et al., 2014). The results revealed that participants abandoned the habit of gifting cigarettes and became much responsible for their societies (Burgess et al., 2014). The perception of the social and health problems that smoking produces encouraged this ethnic group to prohibit this habit.

Sherriff and Coleman (2013) explored the beliefs, behaviors and cessation needs of routine/manual smoking workers in construction sites. The research study consisted of semi-structured focus groups of 23 routine/manual smokers working in UK companies. The results revealed that physical effects, habit, and routine motivate routine/manual workers to continue smoking in the presence of limited work based smoking cessation

services (Sherriff & Coleman, 2013). In Korea, office workers who had smoking coworkers and workers in dirty workplaces were significant predictors increasing the smoking rate (Kim, 2015). Therefore, the physical work environment and coworker's support had great influence in implementing smoking cessation programs at work.

Managerial regulations and policies. The smoking ban is a global target; all countries promote regulations and policies to keep workplaces smoke-free areas (Kouvonen et al., 2012; Lazarus et al., 2012; Nagelhout et al., 2012). Researchers encountered that different breaks, such as smoking breaks, had a negative impact on the community and workplace (Stolz et al., 2013). The general perception at work is against smoking breaks because smokers waste too much time outside during nonbreak periods (Walsh et al., 2011). Also, smoking in public areas is socially unacceptable behavior by nonsmokers (Lazarus et al., 2012). The common target of most organizations is to have a smoke-free environment.

Smoker and nonsmoker employees accepted the effective implementation of the smoking regulations and restrictions in the workplace (Brenner, Born, Novak, & Wanek, 1997). Brenner et al. (1997) conducted a quantitative study and obtained results verifying the supportive role of all employees on reducing smoking behavior through smoking regulations and passive smoking in workplaces. The enforcement of smoking regulations is well-identified and implemented in the European Union countries after 17 years from the date of the study.

However, a standard smoking cessation program may not be effective. For example, transit workers have high work stress that prevents workers from complying

with existing smoking cessation to quit smoking (Cunradi, Moore, & Battle, 2015). Also, Pansu, Lima, and Fointiat (2014) examined the efficiency of adopting the door-in-the-face technique which is a compliance procedure against the information campaigns to reduce smoking among employees. The results revealed that employees in the door-in-the-face group had fewer smoking breaks than the information campaign group (Pansu et al., 2014). Organizations should design the smoking ban programs that fit the working employees.

Nagelhout et al. (2012) investigated the impact of implementing comprehensive smoke-free workplace legislation in Ireland and England compared to implementing a partial legislation in the Netherlands. The results indicated that comprehensive smoke-free legislation in Ireland and England had positive effects on quit attempts and quit success compared to partial legislation in the Netherland (Nagelhout, et al., 2012). The comprehensive smoke-free legislation is more effective in encouraging smokers to quit smoking than partial smoke-free legislation.

Braveman, Hoogesteger, and Johnson (2015) identified the predictors of a successful smoke-free policy on a campus. Staff and students implemented the smoke-free policy through perceived support by peers, never smoker status, perceived student smoking prevalence, campus smoke exposure, and building communication and educational channels (Braveman et al., 2015). In Texas, municipalities employed management concepts to enforce local smoking ban ordinances and to enhance the public support for smoking ban ordinances. It also confirmed a high variety of communication and media techniques employed to inform the public on these bans (Benavides & Peters,

2015). A successful smoke-free campus policy resulted from the wide support of the campus community consisting of students, faculty, and staff.

Twenty states adopted antitobacco control legislations against hiring smokers to reduce healthcare costs, absenteeism, and unproductive time (Prochaska et al., 2013). A significant relationship existed between the smoking status and the employment status. The current smokers will encounter difficulties in getting or keeping a job in the states implementing antitobacco hiring policy, whereas former smokers will get jobs more than current smokers (Prochaska et al., 2013). Therefore, the current hiring condition will encourage the current smokers to quit smoking as the key for employment.

Berman, Crane, Seiber, and Munur (2014) estimated the incurred costs of a smoking employee in the United States according to published data in the literature. They provided an estimated average excess cost of a smoking employee on a nonsmoking employee (Berman et al., 2014). The excess annual costs of a smoking employee to a private employer included the cost of excess absenteeism, presenteeism, smoking breaks, excess health care, and pension benefit (Berman et al., 2014). Employers may reduce the excess costs of smoking employees by applying smoking ban policies.

Wacker et al. (2013) investigated the annual excess health care costs of current and former smokers compared with nonsmokers in Germany. The results indicated that current and former smokers had higher health care costs than nonsmokers, and the productivity losses accounted for about 74% of the total costs (Wacker et al., 2013). As a result, a financial burden of smoking is carried out by the German society so as to prevent smoking and improve the public health situation.

Predictors of smokers' compliance with smoking cessation programs. Most of the European countries succeeded in implementing smoke-free policies at work to reduce the exposure to secondhand smoke (SHS; Benavides & Peters, 2015; Menzin et al., 2012). However, Greek and Bulgarian organizations had difficulties in implementing smoke-free policies at work (Lazarus et al., 2012). The investigations revealed that old employees violated the smoking restrictions at work in Greece, whereas in Bulgaria, female employees violated the smoking bans at work. Older employees in both countries exhibited annoyance from SHS as predictors of nonsmoker assertiveness (Lazarus et al., 2012). Smoking cessation programs will not succeed without effective implementation.

In Hong Kong, observational studies indicated an association of smoking cessation with acupuncture treatment. Liu et al. (2015) explored the predictors of smoking cessation with acupuncture in a Hong Kong population. A positive relationship occurred between tobacco quit rate and acupuncture; when individuals receive sufficient acupuncture treatment, the possibility for tobacco quit increases (Liu et al., 2015). However, this occurred in men more than women because women tend to avoid the pain of acupuncture treatment (Liu et al., 2015). As a result, sufficient acupuncture treatment is a factor for a successful short-term smoking cessation.

The workplace smoking bans (WSBs) have a positive and statistically significant association with the work related stress (Azagba& Sharaf, 2012). Azagba and Sharaf (2012) conducted a quantitative research and obtained results verifying the increase of work stress for males and young adults in workplaces that implement WSBs. However, the support of the surrounding individuals within a community to implement smoke-free

policy is significant (Braveman et al., 2015). Braveman et al. (2015) conducted a study in a public university that revealed that students, faculty, and staff supported the smoke-free campus policy. The community support and collaboration will guarantee a successful implementation of smoke-free policy.

Reitzel et al. (2011) investigated the relationship between subjective social status (SSS) and long-term smoking abstinence during a quit attempt of an ethnic/racial group of smokers. The authors examined whether a significant difference exists on the sociodemographic and smoking characteristics among different racial/ethnical groups (Reitzel et al., 2011). The study results indicated that SSS is a strong predictor of long-term smoking abstinence and that race/ethnicity influences the relationship between SSS and long-term smoking abstinence (Reitzel et al., 2011). Therefore, the ethnic/racial group and SSS is related to long-term smoking abstinence.

The smoking cessation programs are effective methods for smokers wishing to quit this bad habit. Halpern and McRobbie (2012) conducted a pilot case study of Pfizer employees in Europe and accepted the effective implementation of the smoking regulations and restrictions in the workplace. The researchers recommended scanning of the workplace to design a smoke-free program and to engage the senior management in the program (Halpern & McRobbie, 2012). Smoking cessation programs will vary according to the workplace type and culture.

However, organizations that adopted smoke cessation programs, and smoke-free policies are encountering difficulties in the implementation process. Ciccolo and Busch (2014) investigated the literature to identify the organizational role in supporting the

smoking cessation programs in the United States. Schultz, Finegen, Nykifourk, and Kvern (2011) examined the consequences of smoke-free policies in the Canadian healthcare sector and encountered noncompliance of smoke-free policies among patients and healthcare staff. Therefore, a successful workplace smoke-free policy requires the involvement of the top management along with employees.

Productivity losses and absenteeism. The premature mortality due to smoking may contribute to the lost productivity costs. A group of researchers had proposed a model to estimate the present value of lifetime earnings (PVLE) as the indicator for lost productivity costs (Menzin et al., 2012). The results revealed that the productivity losses due to premature mortality contributed to the total cost burden of smoking in many countries (Menzin et al., 2012). The smoking costs will have a negative impact on employee productivity.

Absenteeism, a productivity loss measurement, may occur because of smoking and obesity (Bhojani et al., 2014). Also, the per capita costs of health care related to smoking and obesity increased by 25% and 30% from 1998 to 2011 (An, 2014). Reports indicated that smoking employees had absenteeism rates higher than nonsmoking employees (Suarez-Bonel et al., 2015). The results of a study on Shell Companies' records during 30 years revealed that absenteeism among employees was related to smoking and obesity changes. Excessive absenteeism is greater among current smokers.

Further studies about the relationship between smoking employees and absenteeism were significant. The results revealed that smokers exhibited higher rates of absence than nonsmokers and previous smokers (Weng, Ali, & Leonardi-Bee, 2013).

Smoking increases the risk and duration of absenteeism; therefore, quitting smoking will reduce absenteeism and will save costs for the employers (Weng et al., 2013). Wu et al. (2015) conducted a study to investigate the gender differences in long-term smoking abstinence, and the results revealed that women had less rate of smoking abstinence than men. The absenteeism rate of smokers is greater than nonsmokers and increases among men.

Work engagement may differ between smokers and nonsmokers. Smokers are vulnerable to health problems, high rates of absenteeism, and high rates of disability. As a result, few researchers investigated the differences between smokers and nonsmokers towards time and risk preferences (Adams et al., 2014). The results revealed that smokers will encounter high rates of disability, high rates of absenteeism and low productivity causing difficulties in personal financing (Adams et al., 2014). Most of smokers will not take financial risk because of health problems.

Smoking may cause economic losses through absenteeism and presenteeism related productivity losses. The team production approach was used to assess the relationship between job characteristics and the cost acute and chronic illness resulted from absenteeism and presenteeism at the workplace (Cocker et al., 2012). The results supported the manager's understanding in evaluating the productivity losses because of chronic illness and presenteeism (Cocker et al., 2012). Smoking will increase the health bill due to chronic illness and presenteeism.

Employees underestimate the actual time they spent when having smoking breaks (Ferreira & Esteves, 2016). Researchers explored the actual time and perceived time of

smoking employees and the results indicated that employees spend more time in smoking breaks than they perceive. For a daily eight working hours, employees spend about 47.09 minutes smoking per week (Ferreira & Esteves, 2016). Employers need to evaluate the actual time spent during smoking breaks.

Smoking and secondhand smoke (SHS) exposure increases the economic costs of East Asian countries (Sung, Chang, Wen, & Tsai, 2014). An evaluation of the health costs due to smoking and SHS exposure in Taiwan in 2010 revealed that the smoking prevalence and SHS exposure rates for smoking men were higher than that of smoking women. Also, the direct costs of smoking and SHS exposure contributed to 3.4% of Taiwan's total personal health care expenditures and premature mortality (Sung et al., 2014). The healthcare costs increase with high SHS.

# Methodological Approaches to Workplace Smoking and Cyberloafing

Researchers conducted quantitative and qualitative studies to investigate and explore the causes of personal Internet surfing or cyberloafing and unlimited smoking breaks in workplaces. For cyberloafing, the literature included many quantitative studies and few qualitative. In quantitative studies, the researchers (e.g., Askew et al., 2014; Betts et al., 2014; Coker, 2011; Glassman et al., 2015) proposed hypotheses related to cyberloafing, and distributed online or paper questionnaires over random samples of participants from different businesses. Consequently, they collected the answered questionnaires, analyzed data by using statistical methods, explained and interpreted the results that support or decline the hypotheses (Grover, 2014; Henle et al., 2009; Lim & Chen, 2012; Vitak et al., 2011).

However, for smoking behavior, researchers (e.g., Lazarus et al., 2012; Prochaska et al., 2013; Schultz, 2011; Sung et al., 2014) conducted quantitative and qualitative studies. The quantitative studies included structured anonymous questionnaires or collected data from national surveys whereas qualitative studies included social and ethnic group interviews. After collecting data from the participants' answers in the quantitative and coding data of qualitative studies, researchers had entered data to estimate the influence of smoking on the health risk and financial concerns. The quantitative research method will fit the investigation process of cyberloafing and smoking breaks in different workplaces.

#### **Transition**

Section 1 consisted of the main components of this study such as the business problem background, the problem statement, the purpose statement, and the nature of the study. I have proposed my research question, hypotheses, and theoretical framework related to this study. Also, this section indicated the assumptions, limitations, delimitations underlying this study, and its significance. Finally, I have presented a thorough review of professional and academic literature relevant to the study. The next section, Section 2, will consist of details of sampling, participants, method design, and data analysis. Section 3 will include a discussion of the results and study conclusions.

#### Section 2: The Project

The purpose of this study was to examine the relationship between Internet surfing, smoking breaks in the workplace, and employee productivity. In this section, I summarized my plan to conduct this study according to the ethical research basis. Section 2 included the purpose statement, my role as a researcher, identification of the participants, research method, and research design. I presented the population and sampling process, the measuring instruments, the data collection and analysis, and study validity.

## **Purpose Statement**

The purpose of this cross-sectional, nonexperimental, quantitative correlation study was to examine the influence of wasted time spent on Internet surfing and uncontrolled breaks of smoking on the productivity of employees working in multinational engineering companies. There were two independent variables: the first was the time spent on Internet surfing, and the second was the time spent on uncontrolled smoking breaks. The dependent variable was the employee productivity.

The target population consisted of employees working in a multinational engineering company in Amman, the capital of Jordan. Multinational engineering companies have workplace policies and regulations that unify the practices among culturally diverse employees. Noncompliance with policies and regulations may cause managerial problems in organizations; therefore, multinationals presented a unique environment to study counterproductive cultural practices that span nations (e.g., wasted time at work, as well as practices related to cultures like smoking and Internet surfing).

The implications for positive social change included the potential to help employees quit bad habits like smoking and reduce the health problems. Also, controlling the Internet surfing time would improve the employee productivity in the workplace, protect employees from Internet addiction, and would reduce physical problems.

#### Role of the Researcher

My role as a researcher for this quantitative study started by selecting existing surveys (the instruments) that previous researchers used in earlier studies and provided evidence of reliability and validity (See Askew et al., 2014; Coker, 2011). Based on the existing literature and previous research, I used existing scales and distributed an online survey (via email) through the assistance of the human resources manager for the selected company. The online survey was a relevant data collection process for this study because all participants had computer skills, used English as the business language, and I did not have any direct contact with them; therefore, minimizing the risks of privacy and participants standing (e.g., Betts et al., 2014). The survey included a consent form for participants' acknowledgment and a confidentiality section.

I have completed the training on human participant protection by the National Institutes of Health (NIH) and earned the certificate no. 1467132 that trains me to protect participants' rights during the research (See Appendix F). I followed Belmont Report (1979) protocol that protects the participants according to three ethical principles (a) respect of persons, (b) beneficence, and (c) justice. The consent form for adults provided autonomy and respect of persons, and the confidentiality section minimized the privacy

risks and ensured fair distribution among participants. The objective of this research was to examine the two hypotheses on the participants based on trust, honesty, and respect.

# **Participants**

The target population of this study was full-time employees working in a multinational engineering company (referred to from here forward as XYZ Company) in Amman, Jordan, where I am living. I chose a multinational engineering consulting company for my research because I work in a multinational engineering company, and multinational companies would have common business problems that need investigation and explanation (see Baturay & Toker, 2015; Contreras et al., 2012). I contacted the commercial director in XYZ Company by phone to get permission to conduct my survey among the employees. The manager was cooperative, and we agreed that I would send my survey link to the human resources (HR) manager who would distribute it to all employees by emails. Considering XYZ Company as the target population supported my position as an outside researcher by reducing potential bias relevant to social pressure on participants' responses (see Betts et al., 2014).

## **Research Method and Design**

#### **Research Method**

I used the quantitative method (Baturay & Toker, 2015) to investigate the relationship between Internet use, smoking breaks, and employee productivity. The purpose of using quantitative research methods was to explain phenomena or relationships among variables by collecting numerical data from a specific population and analyzing data statistically (Muijs, 2010; Yilmaz, 2013). Researchers conducted

quantitative research studies to extend their breadth of knowledge, be objective, generalize results within a specific context and uncover existing reality through hypotheses testing (Muijs, 2010, Yoshikawa et al., 2013). Quantitative research studies were available for a large number of participants with minimum risk of bias, minimum costs, and provided objectivity in explaining the responses of anonymous or confidential participants (e.g., Yoshikawa et al., 2013).

The purpose of qualitative research was to subjectively explore human experience (Berger, 2015). Qualitative researchers interacted with few participants through asking open-ended questions within interviews and field observations to collect data (Fusch & Ness, 2015). The results of the qualitative research were applicable for a specific sample and not generalized to a population (Bailey, 2014); therefore, it was not appropriate for my study. Qualitative researchers have experience and skill to design open-ended questions for interviews, whereas close ended questions fitted my study purpose (Fusch & Ness, 2015), and allowed me to avoid interviewer biases that would affect the purity of collected data (Berger, 2015).

The purpose of the mixed methods was to utilize the strengths of both quantitative and qualitative research for better understanding of a phenomenon and results generalization. The mixed method was a combination of quantitative and qualitative research methods; the findings of a quantitative study were expanded and elaborated by conducting a qualitative study (Venkatesh, Brown, & Bala, 2013). The mixed method was not appropriate for this study because its purpose was to examine the relationships among variables.

## **Research Design**

I used a cross-sectional, nonexperimental, quantitative correlation design (Baturay & Toker, 2015) to investigate the relationship between cyberloafing (surfing the Internet at the workplace), smoking breaks, and employee productivity. The study was cross-sectional because I collected data at one specific point in time; I left the survey open for responses for 2 weeks of distribution. A longitudinal study required a long time for data collection and did not fit the time constraints of the doctoral study.

The purpose of this study was to investigate the relationship between independent variables (predictors) and a dependent variable (Smith, 2014). Experimental studies were useful when the researcher plans to investigate the cause and effect relationship between the predictors and the dependent variable within a controlled environment and would have high levels of control and reliability (Martens et al., 2016). Although the independent variables in this study were wasted times of counterproductive behaviors, the values were estimated according to the existing scales of measurement. It was not applicable to measure the exact times with a stopwatch while employees were working, it would have interfered with the personal privacy of the participants, and the results could not be generalized; therefore, the study was nonexperimental. The nonexperimental design study complied with correlations and case studies and was appropriate for this study.

#### **Population and Sampling**

The target population of this study was full-time employees working in a multinational engineering consulting company in Amman, Jordan. The participants used

computers to perform their work activities (e.g., Coker, 2011) and they used English as the business language in their communications. The population was appropriate for this study because (a) indoor smoking is prohibited and smokers smoke outside the building, and (b) Internet access is available for all employees, but social media sites such as Facebook and Youtube are blocked. The company did not have a written policy for Internet use, but the top management sends e-mails on a regular basis to remind employees to avoid cyberloafing activities.

The sampling was probabilistic because the population of interest had been chosen in the first place (Simpson & Lord, 2015). The sample was random because every participant had an equal chance of selection of a given size sample (Simpson & Lord, 2015). The nonprobabilistic sampling did not fit the study objectives because it complied with purposive sampling rather than random.

The G\* Power software indicated the appropriate sample size by identifying alpha value, power level, and the effect size (Faul, Erdfelder, Buchner, & Lang, 2009). When selecting a priori analysis, the sample size calculation requires values for  $\alpha$ , power, and effect size. Cohen (1992) provided medium effect size (0.15) for multiple correlation and regression tests,  $\alpha = 0.05$  (two-tail), the power = 0.8. By using the G\*Power software (www.gpower.hhu.de) and Cohens' values, the minimum sample size was 72 participants (Faul, Erdfelder, Buchner, & Lang, 2009), whereas the population was 84 employees.

#### **Ethical Research**

Quantitative, qualitative, and mixed research methods each included ethical considerations before conducting any study (Simpson & Lord, 2015). Four principles of

ethical conduct (a) research integrity, (b) justice in selection, (c) beneficence, and (d) respect (Wallace & Sheldon, 2015). Walden University IRB reviewed the research proposal and approved the proposal; Walden University's approval number for this study is 09-28-16-0472514. By clicking the survey link, a consent form including a confidentiality section appeared on the first page of the survey. The participants read the consent form and participated by clicking on agree at the end of the consent form.

There were no incentives for the participants. The participants responded voluntarily; they were free to withdraw from the survey at any time (Kim et al., 2015). The participants did not write their names or mention any personal description. The confidentiality and privacy of data were secured and protected (Wang et al., 2013); I will keep the collected data in electronic form on a USB flash memory inside a locked cabinet for 5 years from completion of the study. The name of the organization was hidden before publishing the study.

#### **Data Collection Instruments**

My plan to measure the variables of this study was through using appropriate tools of measurement in alignment with the research design and question. The quantitative research method had a direct measurement like hight and indirect measurement such as knowledge measured by questionnaires (Smith, 2014). I used two scales from the literature to measure the first independent variable (time of Internet use in work) and the dependent variable (productivity). The predesigned scales allowed me to measure the participants' responses through a specific number of questions, facilitate the statistical analysis of the data (Yilmaz, 2013), and each scale had an evident of validity

and reliability. Also, I included one question to measure the second independent variable (time of smoking breaks).

The first page of the survey instrument was an informed consent form. The purpose of the consent form was to inform that participation is voluntary, and the participants were free to respond to the survey or withdraw. Also, the consent form confirmed the confidentiality of the given information and the proper storage of collected data (e.g., Wang et al., 2013). The survey began with demographic questions to describe the tested population. The demographic variables included sex, age, level of education, overall work experience in life, and smoking status.

Lim (2002) had designed the cyberloafing scale to measure the frequency of employee's engagement in different cyberloafing behaviors. I used Askew's (2011) modified 19-items version of Lim's scale. The permissions to use and reprint the scale from Askew and Lim are available in Appendix D. Endicott (1997) developed The Endicott Work Productivity Scale (EWPS) to measure the attitudes and behaviors that influence work performance (see Appendix E for permission to use and reprint the scale). For the time of smoking breaks, I wrote a question to estimate the smoking time in minutes during a working day.

I used existing ordinal scales to measure the quantitative variables of my study.

Askew (2011) and Endicott (1997) applied the 6-point and 5-point Likert scales to measure ordinal values of the tested variables; cyberloafing and employee productivity.

The ordinal measurement indicated multiple choices of answers and was suitable for

statistical computations. The third variable, smoking breaks time, was measured through one question.

The cyberloafing scale consisted of three main questions with 0.92 Cronbach's alpha ( $\alpha$ ) as the reliability coefficient (see Askew et al., 2014). The first question included 19- items that measure the personal Internet usage at work, whereas the second question included 7-items that measure the personal use of cell phones. Each question had a 6-point Likert response scale: 1 = never, 2 = a few times per month, 3 = a few times per week, 4 = once a day, 5 = a few times a day, 6 = constantly. The third question included 4-items that estimate the frequency of breaks using the Internet with 5-point Likert response scale: 1 = never do this, 2 = less than once a day, 3 = once or twice a day, 4 = three to four times a day, 5 = five or more times a day. The mean value of the total score of questions 1 and 2 of the cyberloafing scale measured the first independent variable. The second independent variable, smoking breaks time, had 5 choices of response: never, 1-5 minutes, 6-15 minutes, 16-30 minutes, more than 30 minutes.

The EWPS consisted of 25 items with a Cronbach's alpha ( $\alpha$ ) of 0.78 (see Coker, 2011). The instrument indicated the behaviors affecting work performance and efficiency by responding to 5-point Likert scale. Each question had five choices of response: 0 = never, 1 = rarely, 2 = sometimes, 3 = often,  $4 = almost\ always$ , and the total score would range from 100 (low productivity) and 0 (high productivity). The total score of the EWPS measured the dependent variable.

The cyberloafing scale and EWPS were appropriate for this study because many researchers adopted these scales in their studies. Kim et al. (2015) had applied Lim's

scale (2002) to indicate how often the white collar employees engage in cyberloafing, and the reliability coefficient  $\alpha$  was 0.92. Lim and Chen (2012) had applied the scale developed by Lim and Teo (2005) which was a modified version of Lim's scale to estimate how often the employees engage in cyberloafing behavior and  $\alpha$  ranges were 0.76 to 0.85. Also, Jia et al. (2014) conducted a study to investigate cyberloafing by using Lim and Teo scale (2005) with  $\alpha$  of 0.85. Fathonah and Hartijasti (2014), and Coker (2011) used EWPS developed by Endicott (1997) to estimate the behavior that influences the performance within a population of employees from different sectors, and  $\alpha$  was 0.92. However, I could not find questions that identified the smoking break time in the literature or from existing scales; therefore, I added one question for smoking breaks with multiple choice answers presenting the estimated smoking time reported by the participants.

I assessed the reliability of each variable by measuring Cronbach's alpha (reliability coefficient) using the SPSS software. The acceptable value of  $\alpha$  was greater than 0.7, and according to previous studies, cyberloafing scale, and EWPS had acceptable values of  $\alpha$ . Also, I verified the reliability of the smoking breaks variable by calculating  $\alpha$ . I verified data validation by using the SPSS software (Green & Salkind, 2014).

My intention is to keep the raw data in a safe place (inside a locked cabinet) minimum 5 years from the date of publishing this doctoral study. The data I collected in electronic form and saved on my personal laptop protected with a password, on external hard drive, and USB flash drive. Future researchers may request access to the study data without causing any danger of prejudicing.

## **Data Collection Technique**

The participation of this study was voluntary, and the participants were free to participate or withdraw at any time of the survey. The survey distribution was online cross-sectional; electronically through a link (Brock et al., 2013) because it was less expensive, faster, and relevant to the research question. However, an online survey may encounter false information due to social desirability concerns (Liberman et al., 2011). SurveyMonkey.com was the appropriate engine to upload the survey questions and distribute among participants then recollect for data analysis (e.g., Fathonah and Hartijasti, 2014; Messarra et al., 2011). A pilot study was not required because many researchers designed, verified, and justified using these scales with acceptable reliability and validity.

#### **Data Analysis**

The central research question of this study that the participants answered by responding to the survey questionnaire was: What is the relationship between time spent on Internet surfing, uncontrolled smoking breaks, and employee productivity? The hypotheses that I examined were:

 $H_01$ : There is no relationship between Internet surfing and employee productivity.

 $H_a$ 1: There is a relationship between Internet surfing and employee productivity

 $H_02$ : There is no relationship between smoking breaks and employee productivity.

 $H_a2$ : There is a relationship between smoking breaks and employee productivity.

First, I analyzed descriptive statistics such as means, standard deviations, and frequencies for the demographic data. Second, I conducted correlation among Internet surfing (cyberloafing) time, smoking breaks time, and employee productivity to identify the relationships and directions between them. Third, I conducted the multiple regression tests to reveal the truth of each hypothesis in this study. The IBM SPSS Statistics 23 was the statistical package I used for the correlation and the multiple regression tests (see Wang et al., 2013).

The correlation analysis was appropriate for this study because the Pearson Correlation Coefficient (*r*) indicated the relevant degree of linearity among variables (Green & Salkind, 2014). The correlation coefficient revealed whether a positive, negative, or neutral relationship exists for each variable in the study (Green & Salkind, 2014; Liberman et al., 2011). The multiple linear regression tests of the proposed hypotheses indicated if we can predict the dependent variable (employee productivity) from the independent variables (Liberman et al., 2011). The acceptable level of statistical significance (*p*-value) was 0.05; that indicated that the probability of falsely rejecting the null hypothesis was 5% of the data analysis results (Greasly, 2008).

The purpose of correlation was to examine the direction and strength of a relationship between two variables (Greasly, 2008). I conducted two correlations; the first was between cyberloafing time and productivity, and the second was between smoking breaks time and productivity. A scatterplot for each relation, and the correlation coefficient indicated if a positive, negative, or neutral relationship exists between the tested variables (Greasly, 2008; Green & Salkind, 2014). As a rule of thumb, a weak

correlation exists when the correlation coefficient ranges between 0.1to 0.4, and a strong correlation exists when the correlation coefficient is above 0.5. When the correlation coefficient is close to zero, no relationship will exist between the two variables (Cohen, 1992).

The purpose of a multiple linear regression was to show how well the two independent variables (predictors) can predict the dependent variable (outcome) by using a linear relationship. The SPSS software can calculate Beta ( $\beta$ ) that indicates the expected increase or decrease in the dependent variable. The value of  $\beta$  would order initially the independent variables' contributions to the multiple regression equations (Nathans, Oswald, & Nimon, 2012).

Other statistical analyses like the Chi-Square test, the Mann-Whitney U test, and the Kruskal-Wallis and the median tests were not appropriate for this study because they did not answer the central research question. The Chi-Square test was appropriate for large sample size where each variable had two or more values that resemble the two or more categories for the variable. The Mann-Whitney U test was appropriate for evaluating the median differences between two groups. The Kruskal-Wallis and the median were appropriate for experimental, quasi-experimental, and field studies (Green & Salkind, 2014).

The raw data should be clean, screened, and ready for the high quality of statistical analyses (Meade & Craig, 2012). The main steps for data cleaning were (a) missing data imputation, (b) outlier detection, (c) noise removal, and (d) time alignment/delay estimation (Xu et al., 2015). Incomplete, inaccurate, or irrelevant data

may produce false conclusions; therefore, missing data can be deleted, mean replacement, and removed (Xu et al., 2015). The SPSS consisted of default procedures to remove the missing data and follow the software instructions.

The assumptions pertaining to the statistical analyses were: (a) variables are normally distributed, (b) a linear relationship between the dependent variable and the independent variables, (c) the residual is homoscedastic; the independent variables have equal variance of errors, and (d) reliability of the measurement (Lopez, Valenzuela, Nussbaum, & Tsai, 2015). I examined the data distribution via histogram to test the normality assumption, whereas the scatterplot indicated the linearity assumption (Green & Salkind, 2014). The F test verified the assumption of homoscedasticity and low reliability was corrected to obtain the actual relationship in the population (Lopez et al., 2015).

Any violation of the four statistical assumptions was detected and corrected before data processing (Lopez et al., 2015). The inferential results of the confidence interval were 95%, and the effect size was medium (0.15; Cohen, 1992). The probability of type-1 error and type-2 error was 0.05 (Green & Salkind, 2014).

I used the IBM SPSS Statistics 23 software program for data analyses for many reasons. First, I had used it during the quantitative research course and become familiar with the available tools. Second, the SPSS was widely used by many researchers because it is user-friendly, reliable, and available for free by Walden University. Finally, the software presented the data into tables and graphs for easy interpretation of results.

## **Study Validity**

The design validity for quantitative studies consisted of external and internal validity (Venkatesh et al., 2013). The external validity refers to the degree to which study results can be generalized to similar settings (Venkatesh et al., 2013). The external validity of this quantitative correlation study referred to the researcher's ability to interpret outcomes accurately to reflect the truth in the objective world (Mckibben & Silvia, 2016; Venkatesh et al., 2013). The sampling strategy was random probabilistic, and that indicated a strong external validity, whereas nonprobabilistic sampling would indicate weak external validity. I addressed the potential threats to external validity and ensured the validity of the research results (Mckibben & Silvia, 2016).

The internal validity referred to approximate truth about interferences of a causal relationship; therefore, it was applicable for quantitative experimental and quasi-experimental designs. This study is correlation nonexperimental; therefore, threats to internal validity was not applicable. However, I identified the threats to statistical conclusion validity that affect type I error rate by considering (a) the instrument's reliability, (b) data assumptions, and (c) sample size. Type I error is defined as the probability of rejecting the null hypothesis when it is true (Johnston et al., 2014).

The reliability of the instruments of this study, cyberloafing scale, and EWPS, was acceptable (i.e., > 0.7) based on previous data from the literature. My role as a researcher was to verify the reliability of each instrument by calculating the reliability coefficient known as Cronbach's alpha ( $\alpha$ ; See Gözü et al., 2015; Liberman et al., 2011).

The collected data was introduced to the SPSS software that had a procedure to compute α. Accordingly, the results of Cronbach's alpha would ensure the instrument reliability.

Before conducting the statistical tests, my role as a researcher was to identify the assumptions relevant to the study. Lopez et al. (2015) identified the assumptions relevant to multiple regression tests as (a) variables are normally distributed, (b) a linear relationship between the dependent variable and the independent variables, (c) the residual is homoscedastic; the independent variables have equal variance of errors, and (d) reliability of the measurement. Violation of any assumption would increase the threat to a statistical conclusion.

The threat of incorrect results may occur because of the sample size. Too small sample size would not support the study results, whereas large sample size would indicate unnecessary work and additional effort. Using the G\*Power software determined the acceptable sample size relevant to the correlation multiple regression tests with a minimum threat to sample size (Wester, Borders, Boul, & Horton, 2013).

## **Transition and Summary**

The purpose of Section 2 was to identify the research strategy and forecast how I would conduct the research. This section included the purpose of the study, a description of my role as a researcher, the participants' characteristics, the research method and design. Also, a thorough explanation of the sampling process, selection of instruments, data collection technique, data analysis, and validity verification was available. All research processes considered the ethical aspects when conducting the research. Section 3 will include my discussion of findings and conclusions.

# Section 3: Application to Professional Practice and Implications for Change Introduction

The purpose of this cross-sectional, nonexperimental, correlational study was to examine the influence of wasted time spent on Internet surfing and uncontrolled smoking breaks on the productivity of employees. The independent variables were the time spent on Internet surfing and the time spent on uncontrolled smoking breaks. The dependent variable was employee productivity. Based on the study results, I failed to reject the first null hypothesis because the correlation results indicated that there was no significant relationship between Internet surfing and employee productivity. However, the second hypothesis was not applicable because the sampled population consisted mainly of nonsmokers; therefore, smoking was not a source of wasted time in XYZ company. In this section, I present the findings and discuss the results in more detail and with context. I also describe the implications for business and social change.

## **Presentation of the Findings**

The statistical tests that I applied for data analysis were Pearson Correlation and Linear Regression. The independent variables were the time spent on Internet surfing (cyberloafing) and the time spent on uncontrolled smoking breaks. The dependent variable was employee productivity. The first correlation tested whether there was a significant relationship between time spent on Internet surfing and employee productivity. The second correlation tested whether there was a significant relationship between time smoking and employee productivity.

The HR manager in company XYZ sent the survey link to 84 employees, along with an invitation e-mail. The period of participation was 1 week, but because participation was low, the survey was extended for another week. By Week 2, the number of employees who responded and completed the survey was 34 participants whereas the sample size should be 72 employees, according to G\*Power software. This sample size is further addressed in the discussion following the presentation of the results.

The demographic characteristics of the participants (such as sex, age, educational level, life work experience, and smoking status) are presented in Table 2. The characteristics shown in the table indicate that the sample consisted of 47.1% males and 52.9% females with an average age range 25-44 years (70.6%). Most of the participants were Bachelor degree holders (64.7%) with overall work experience 6-20 years (67.7%). The majority was nonsmokers (80%) whereas the minority was smokers (12.5%).

Table 2

Descriptive Statistics of Participant's Demographic Data (N=34)

Demographic					
Characteristic	Description	Mean	Std. deviation	Frequency	%
Sex					
	Male	1.53	.507	16	47.1
	Female			18	52.9
Age (Years)					
	18-24	2.5	.930	4	11.8
	25-34			15	44.1
	35-44			9	26.5
	45-54			6	17.6
Educational Level					
	College Degree	2.21	.641	3	8.8
	B. Sc.			22	64.7
	Master			8	23.5
	Doctorate			1	2.9
Work experience					
	Less than 1	3.35	1.12	3	8.8
	year				
	1-5			3	8.8
	6-10			12	35.3
	11-20			11	32.4
	More than 20			5	14.7
Smoking Status					
	Current smoker	2.71	.676	4	11.8
	Ex-smoker			2	5.9
	Non-smoker			28	82.4

I tested the reliability of the cyberloafing and productivity scales before conducting the statistical tests to ensure that Cronbach's alpha was > 0.7. The values of Cronbach's alpha are presented in Table 3. Both scales are reliable to use; alpha values for cyberloafing and productivity scales were 0.87 and 0.83 as shown in Table 3.

Table 3

Scales Reliability; Cronbach's Alpha (α)

Scale	α
Internet surfing (Cyberloafing)	0.87
Employee productivity	0.83

The descriptive statistics of the independent variables (Internet surfing, smoking breaks) and dependent variable (employee productivity) are presented in Table 4. I also tested the assumptions of linearity, normality, outliers, and homoscedasticity. Figure 1 and Figure 2 scatterplots used to test the linearity between each independent variable and the dependent variable. Preliminary analyses showed a linear relationship between both independent variables (Figure 1) and (Figure 2) and the dependent variables, and there were no outliers.

Table 4

Descriptive Data of Independent and Dependent Variables

Variable	N	Mean	Std. deviation	Variance
Internet surfing time	34	2.361	0.554	0.307
Smoking break time	34	1.206	0.641	0.411
Employee productivity	34	24.559	9.023	81.406

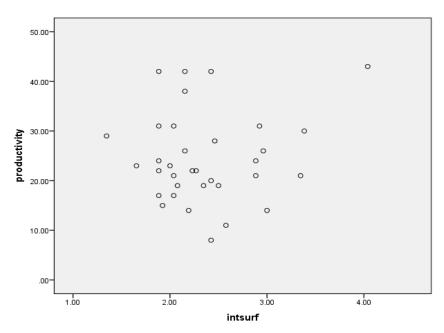


Figure 1. Scatterplot between Internet surfing and employee productivity.

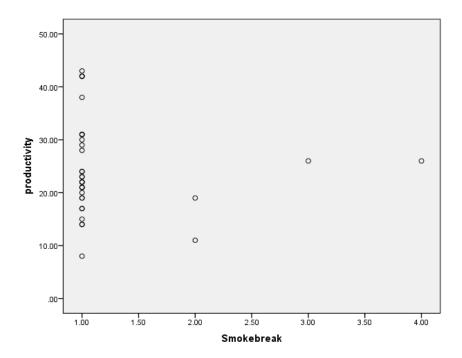


Figure 2. Scatterplot between smoking break and employee productivity.

Shapiro-Wilk test for normality was suitable for small size samples. The variable is normally distributed if p > .05. Table 5 shows the values of Shapiro-Wilk coefficient for each variable. Employee productivity was normally distributed, as assessed by Shapiro-Wilk's coefficient sig. (p = .063 > .05). However, Internet surfing and smoking breaks were not normally distributed (the sig. values were < .05; see Table 5). Although the statistical assumption of normal distribution was violated, the Pearson correlation test was applied because it is somewhat robust to deviation from normality.

Table 5

Test of Normality (Shapiro-Wilk Test)

Variable	Shapiro-Wilk Coefficient	Sig.
Internet surfing time	0.372	.000
Smoking break time	0.925	.022
Employee productivity	0.940	.063

The assumptions necessary to run multiple linear regression tests were verified by the scatterplot of residuals (see Figure 3) to test homoscedasticity, and the histogram (Figure 4) to verify normal distribution of the residuals. The visual inspection of Figure 3 indicated that there was homoscedasticity. Also, the histogram showed that standardized residuals were approximately normally distributed.

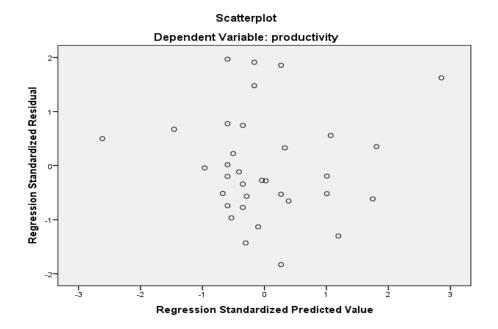


Figure 3. Scatterplot of regression residuals (homoscedasticity test).

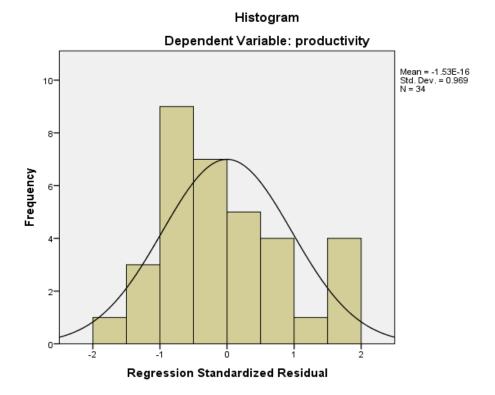


Figure 4. Histogram (test of normally distributed residuals).

I tested two correlations to examine the hypotheses, and the results are tabulated in Table 6. The results indicated that there was a weak correlation between Internet surfing and employee productivity, r(32) = 0.114. Although a positive relationship existed between Internet surfing and employee productivity, (p-value = 0.519); the null hypothesis was not rejected, and there is no significant relationship between Internet surfing and employee productivity.

Table 6

Pearson Correlation Coefficient

Independent Variables	Employee productivity		
	Pearson Correlation Coefficient	Sig, (2-tailed)	
Internet surfing time	.114	.519	
Smoking break time	062	.726	

Although smoking breaks data were insufficient to run the correlation test, the correlation between smoking breaks and employee productivity was -0.062 and p-value = 0.726 (see Table 6). The results indicated that correlation was neutral (.062 close to zero) and there was no significant relationship between smoking breaks and employee productivity. Due to the small subsample of employees who currently smoked (n = 4), smoking breaks in the tested sample was not an activity engaged in often or consistently by a large portion of the sample (11.7% of the sample were smokers). Based on this value, it is sufficient to conclude that smoking during work time was not a significant source of wasted time; therefore, does not impact productivity.

The multiple linear regression model was performed to test if the employee productivity (dependent variable) can be predicted from the Internet surfing and smoking breaks (independent variables). The results are tabulated in Table 7 and indicated that the model failed to predict employee productivity. The slope coefficients of each independent variable (Internet surfing and smoking breaks) were statistically insignificant (p = .509) > .05 and p = .696 > .05). Therefore, the multiple linear regression models failed to predict

employee productivity from each of the independent variables (Internet surfing time and smoking breaks time).

Table 7

Regression Test Analysis (N = 34)

Variable	В	Std. error	Beta	t	Sig.
Constant	21.167	7.483		2.829	.008
Internet surfing time	1.942	2.907	.119	.668	.509
Smoking break time	991	2.511	070	395	.696

The results of the correlation tests and regression models are presented to answer the research question statistically with respect to the procedural justice theory. However, the results verified that there is no relationship between Internet surfing time, smoking breaks time, and employee productivity. Therefore, the Internet surfing and smoking breaks time (independent variables) cannot predict employee productivity (dependent variable) and the null hypotheses fail to be rejected.

The purpose of this study was to explain the influence of procedural justice on employee's engagement into counterproductive behaviors like personal Internet use and unlimited smoking breaks in the workplace. The results support the researchers' findings that employees tend to justify wasting their time in cyberloafing as a way to return justice whenever they perceive injustice in the workplace (Askew et al., 2014; Kim et al., 2015; Öğüt et al., 2013). The results of my study indicated that employees are satisfied with the procedures established by company XYZ for Internet use, and they responded to the fairness of Internet use policies. These findings comply with Grover's conclusion (2014)

that employees responded positively to Internet usage policies when designed according to justice principles and followed fair, transparent, equal, repeated policies with free access to information (Son & Park, 2016).

The benefits of Internet surfing were reported in the literature to prove that Internet surfing is not a counterproductive behavior. Work policies that promote resource nourishment showed effective performance and high levels of concentration during mental tasks (Bucciol, Houser, & Piovesan, 2013). The personal Internet use can be directed toward increasing knowledge, skill, and creativity (Coker, 2013; Jian, 2013) and may contribute positively to the work environment. Lim and Chen (2012) considered the cyberloafing time a positive behavior that increases productivity among employees. The employee productivity increased when the employer admitted the use of Internet browsing breaks in the workplace (Coker, 2013).

Also, using mobile devices in businesses has benefits to employers. Chung, Lee, and Kim (2014) improved the flexibility of workflow by implementing mobile technology in the workplace. Yueh et al. (2016) concluded that a positive relationship exists between using mobile technology and improving work performance. Therefore, organizational policies facilitating the use of mobile technology in the workplace will improve the work performance.

However, other researchers consider Internet surfing for personal purposes as a negative behavior that causes low productivity (Coker, 2013) and suggested several methods to reduce employees' engagement in Internet surfing behavior. Jian (2013) indicated that employees who work in teams were less likely to engage in personal online

communication at work compared to employees who work individually. Paulsen (2015) reported that reducing the empty labor and improving the sense of work commitment among employees will increase the level of employee engagement at work.

#### **Applications to Professional Practice**

The findings of this study verified that Internet surfing has no impact on employee productivity because there was no significant relationship between Internet surfing and employee productivity. Employers need to perceive the professional benefits of Internet use at work when establishing organizational procedures and policies (Coker, 2011). Employees who browse the Internet for short breaks during a working day will encounter less stress, gain informal learning method, and encourage better time management (Taylor et al., 2013). Work policies that promote Internet use as a resource or educational nourishment and not a counterproductive behavior have shown effective performance and high levels of concentration during mental tasks (Bucciol, Houser, & Piovesan, 2013).

Also, many companies may improve the flexibility of workflow by implementing mobile technology in the workplace (Chung, Lee, & Kim, 2014). Yueh et al.(2016) explained that a positive relationship exists between using mobile technology and improving work performance. Companies are encouraged to establish organizational policies that facilitate the use of mobile technology in the workplace to improve the work performance. On the other hand, researchers are encouraged to investigate and identify the real counterproductive behaviors that cause low employee productivity.

#### **Implications for Social Change**

The results of this study may positively affect social change by helping employees to stay connected with friends and family during the workday, supporting a healthy worklife balance. Employees who engage in personal Internet activities at work tend to meet private demands and obligations, even when the employer restricts the use of computers (König & Caner de la Guardia, 2013). However, organizations can motivate employees to control the personal use of the Internet by identifying the perceived benefits, emotions, and habits for employees (Moody & Siponen, 2013). A healthy, moderate amount of Internet connectivity will benefit employees.

There is also room for organizations to foster a healthy, trusting, and rewarding work environment for its employees. If employees are allowed this time and connection with their personal lives, throughout the day, they may feel more enriched and happy at work. Organizations are invited to establish and modify strategies that encourage fair organizational procedures to enhance the perception of justice among employees who will trust their employers' procedures and control their personal use of the Internet at work.

#### **Recommendations for Action**

Employers may benefit from this study by identifying what are truly counterproductive behaviors among employees. Many companies have considered Internet surfing as a source of wasting time in workplace and adopted policies and regulations to monitor Internet use (Askew et al., 2014; Cheng et al., 2014; Glassman et al., 2015; Ugrin & Pearson, 2013). However, other counterproductive behaviors are

overlooked and need exploration like presenteeism, procrastination, and social chatting (O'Neill et al., 2014; Wan et al., 2014). Organizations can benefit by identifying which activities are truly affecting productivity; it may not be the ones they think. I recommend that companies take steps to identify which behaviors are affecting productivity, and which actually may foster a better working environment for their employees in the long term.

#### **Recommendations for Further Research**

The findings of this study may be of benefit to future researchers who examine other workplace managerial practices. What may initially appear to be a hindrance may indeed be a benefit, or potential benefit, to employees and the organization. The expected limitation like sample size was dominant in this study because the small sample size affected the statistical results of the correlational tests. Further research should be conducted with larger samples and in areas where a large portion of the employee population smokes during the workday.

I also recommend qualitative studies on Internet use at work. Interviews and observations with participants may reveal the human perception toward using the Internet for personal purposes, as well as time spent smoking. A qualitative exploration of this topic may help researchers and organizations to understand the *why* and *how* associated with these activities. Exploring the Internet surfing behavior further may also lead to additional insights on how procedural justice theory operates.

#### Reflections

The decision to conduct a quantitative research study instead of a qualitative was finalized in my mind early in the development of my study. Both the topic and research question required a quantitative approach. The search process for writing the literature review section was the longest amount of time and work spent on the DBA journey. My challenge was to collect related peer-reviewed articles within the last 5 years, striving to meet the 85% rule.

Using the online survey was relevant to the Internet use at work. My intention when choosing XYZ company, that I do not work for, was to: (a) avoid any interaction with the participants, (b) guarantee that participants are anonymous for me as a researcher, (c) minimize the risk of personal bias, and (d) collect data from a large number of people, so as to obtain generalizable results. However, the obstacle occurred after data collection stage, when about 50% of the target population participated in the survey, whereas the rest did not. As a result, the responses were less than the required number. The sample size condition to run the statistical tests was violated.

Another problem occurred when the second independent variable, smoking breaks time, was not dominant in the target sample; the number of smoking employees who participated was only four. This finding indicated that time spent in smoking breaks was neither a significant source of wasted time nor a significant impact on employee productivity in the company because the majority of the sample were nonsmokers. However, I ran the statistical tests with the available data, presented the results in tables and figures, and interpreted the findings on the proposed hypotheses.

#### **Conclusion**

The findings of this quantitative study highlighted the importance of identifying the organizational policies and regulations for Internet use in workplace. The results of correlation tests and multiple linear regression models indicated that there was no relationship between Internet surfing, smoking breaks, and employee productivity. Therefore, the employee productivity was not affected by the time employees spend on Internet surfing at work or in smoking breaks during work time.

The selection of procedural justice was appropriate for this study because it explained the personal Internet use at the workplace. The theory facilitates employees' acceptance and commitment to organizational decisions through fair treatment that builds interpersonal trust and loyalty towards organizations. Employees feel secured, trusted, and valued when organizations have high levels of procedural justice and therefore, comply with the organizational activities.

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# Appendix A: Cyberloafing Scale

1. During office hours, how often do you do each of the following through a

### DESKTOP COMPUTER or LAPTOP?

	1	2	3	4	5	6
	Never	A few times per month	A few times per week	Once a day	A few times a day	Constantly
_		1. Visit nonjob	related websi	tes		
_		2. Visit general	news website	S		
_		3. Visit entertai	nment website	es		
_		4. Visit sports r	elated website	es		
_		5. Instant messa	ge/chat online	e		
_		6. Download no	n-work relate	d information		
_		7. Look for emp	oloyment			
_		8. Shop online				
_		9. Play online g	ames			
		10. Visit adult o	oriented (sexua	ally explicit) v	vebsites	
		11. Visit online	discussion bo	ards or forum	S	
		12. Visit video	sharing sites (	Youtube, etc.	)	
_						
					, ,	
_						
- - -		10. Visit adult o	oriented (sexual discussion both sharing sites ( networking we ment or banking work related e	Youtube, etc.) ebsites (Facel ng websites email	s	

	1	7. Receive non	-work related	email		
	1	8. Play games	on social netw	vorking sites (	(Facebook ga	mes)
	1	9. Visit social	news websites	s (reddit)		
2.	. During office hours, how often do you do each of the following though a CELI					
	PHONE?					
	1	2	3	4	5	6
	Never	A few times per month	A few times per week	Once a day	A few times a day	Constantly
	1	. Read/write no	onwork email			
2. Visit nonjob related websites						
	3	. Visit social n	etworking we	bsites (Facebo	ook, etc.)	
	4	Shop online				
	5	. Make phone	calls			
	6	Send or recei	ve text messag	ges		
	7	'. Play games				
3.	On a typical	work day, how	v often do you	ı do		
	1	2	3		4	5
	Never do this	Less than once a day	e Once or tw a day		to four s a day	Five or more times a day
	1	. Take a quick	break using a	computer		
	2	2. Take a quick	break using a	cell phone		
	3	. Take a long b	reak using a c	computer		

\_\_\_\_\_4. Take a long break using a cell phone

# Appendix B: Endicott Work Productivity Scale (EWPS)

During the past week, how frequently did you

0	1	2	3	4
Never	Rarely	Sometimes	Often	Almost Always
	1. Arrive at work	late or leave work	early?	
	2. Take longer lur	nch hours or coffe	e breaks?	
3	3. Just do no worl	k at times when yo	ou would be exp	ected to be
working?				
	4. Find yourself d	laydreaming, worr	ying, or staring	into space when
you should	be working?			
	5. Have to do a jo	b over because yo	ou made a mistal	ke or your
supervisor t	old you to do a jo	ob over?		
	6. Waste time loo	king for misplace	d supplies, mate	erials, papers, phone
numbers, et	c.?			
	7. Find you have	forgotten to call so	omeone?	
8	8. Find you have	forgotten to respon	nd to a request?	
	9. Become annoy	ed with or irritated	d by coworkers,	boss/supervisor,
client/custo	mers/ vendors, or	others?		
	10. Become impa	tient with others a	t work?	
	11. Avoid attendi	ng meetings?		
	12. Avoid interac	tion with coworke	rs. clients. vend	lors, or supervisors?

	_13. Have a coworker redo something you had completed?
	_14. Find it difficult to concentrate on the task at hand?
	_15. Fall asleep unexpectedly or become very sleepy while at work?
	_16. Become restless while at work?
	_17. Notice that your productivity for the time spent is lower than
expected?	
	_18. Notice that your efficiency for the same spent is lower than
expected?	
	_19. Lose interest or become board with your work?
	20. Work more slowly or take longer to complete tasks than expected?
	_21. Have your boss/ coworkers remind you to do things?
	22. Not want to return phone calls or put off returning calls?
	23. Have trouble organizing work or sitting priorities?
	_24. Fail to finish assigned tasks?
	_25. Feel too exhausted to do your work?

# Appendix C: Smoking Breaks Question

1. How many minutes do you spend in smoking during a working day?

1 2 3 4 5

Never 1-5 minutes 6-15 minutes 16-30 minutes More than 30 minutes

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Appendix D: Permission to use and reprint Cyberloafing Scale

Huda Mashal

Mar 18 (4 days ago)

to kaskew2

Dear Dr. Askew,

My name is Huda Mashal, and I am online D.B.A student in Walden University. I am writing the proposal for my doctoral study about "The wasted time of uncontrolled workplaces' breaks", and I will investigate the influence of cyberloafing and smoking breaks on employee productivity by using a quantitative research method. I found your article "Explaining cyberloafing: the role of the theory of planned behavior" that included an extended 19-item version of Lim's (2002) cyberloafing scale. I will appreciate your permission to use the extended 19-item version of cyberloafing scale for my D.B.A study.

Best Regards,

Huda Mashal

Kevin Askew 5:30 AM (16 hours ago)

to me

Hi Huda,

Thanks for your email. And good luck on your study! Lim's scale was created by Lim, and I added a couple questions. I'm not in a position to give you permission to

use. But I don't believe you need permission...in fact, I'm pretty sure about that. I didn't

get permission to use it for my dissertation.

You DO have permission to use any of the scales that I created (e.g., descriptive norms

scales, ability to hide cyberloafing, cyberloafing attitudes, cyberloafing intentions).

Good luck!:)

Kevin

Dear Dr. Kevin,

Many thanks for your permission dated Mar. 22, 2016 to use the Cyberloafing scale for

my doctoral research. I would appreciate having your permission to reprint the scale.

Thanks in advance.

Regards,

Huda Mashal

Hi Huda,

You have my permission to reprint any of my scales.

Hope your dissertation went well!

KA

From: Huda Mashal

Sent: Friday, 12 February 2016 8:27 AM

To: Lim Kim Geok, Vivien

**Subject:** Request for permission to use cyberloafing scale

Dear Dr. Lim,

My name is Huda Mashal, and I am online D.B.A student in Walden University. I am writing the proposal for my doctoral study about "The wasted time of uncontrolled workplaces' breaks", and I will investigate the influence of cyberloafing and smoking breaks on employee productivity by using a quantitative research method. I will appreciate your permission to use the extended 19-item version of cyberloafing scale for my D.B.A study.

Best Regards,

Huda Mashal

Lim Kim Geok, Vivien 2:31 AM (17 hours ago)

to me

Ok, good luck.

Dear Dr. Lim,

Many thanks for your permission dated Feb. 12, 2016 to use the Cyberloafing scale for my doctoral research. I would appreciate having your permission to reprint the scale.

Thanks in advance.

Regards,

Huda Mashal

Lim Kim Geok, Vivien

ok

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Appendix E: Permission to use and reprint Endicott Work Productivity Scale

Huda Mashal

to je10, bcc: Kelly

Dear Dr. Endicott,

My name is Huda Mashal, and I am online D.B.A student in Walden University.

I am writing the proposal for my doctoral study about "The wasted time of

uncontrolled workplaces' breaks", and I will investigate the influence of cyberloafing

and smoking breaks on employee productivity by using a quantitative research method.

I will appreciate your permission to use Endicott Work Productivity Scale for my

D.B.A study.

Best Regards,

Huda Mashal

Endicott, Jean <

to me

Please excuse my delay in responding to your message. I have been out of my

office and did not have access to my e-mail. You certainly have my permission to use

the Endicott Work Productivity Scale (EWPS) in your doctoral study. I am attaching a

copy of the procedure along with information regarding scoring and a list of

publications of which I am aware. Feel free to contact me if you have question

Dear Dr. Jean,

Many thanks for your permission dated Feb. 17, 2016, to use the Productivity scale for my doctoral research. I would appreciate having your permission to reprint the scale.

Thanks in advance.

Regards,

Huda Mashal

Endicott, Jean

to me

You certainly have my permission to reproduce the scale for use in your research.

Appendix F: Protecting Human Subject Research Participants

