UNDERGRADUATE STUDENTS’ PERCEPTIONS OF CYBERLOAFING

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ABSTRACT

Cyberloafing is the use of a company’s internet for personal reasons during a time when an employee is expected to be working. This study examined prevalence and seriousness of cyberloafing and student perceptions of employees’ cyberloafing habits through a survey of 253 university students. Results indicated that the most serious cyberloafing activities are the least prevalent. Students also reported a much higher perception of employee cyberloafing than they thought would be acceptable in the workplace. The implications of these results are discussed further.
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Introduction

The use of technology by employees at work has been growing rapidly for the past decade. The increasing mobility of devices such as laptops, tablets, and cellphones keep employees in constant contact with the technology that they use to work. These mobile devices provide a constant connection to workplace features as well as the internet. Communication technology advancements are generally thought to bring about increased employee productivity, but it also allows for opportunities that can decrease productivity known as the “productivity paradox.” A large portion of the decreased productivity can be contributed to cyberloafing or the personal use of the internet during work hours (McCune, 1998, pp. 3-5).

Almost a decade ago in 2005, “around 61% of American employees engaged in cyberloafing of some form” (Vivien K.G. Lim, 2012, p. 343). It has been known that cyberloafing is common in the workplace, the majority of research has moved to discovering what kind of cyberloafing is taking place and what drives employees to commit the act of cyberloafing. One study found the links between role ambiguity and role conflict with cyberloafing (Henle & Blanchard, 2008). Employees that do not have enough work or have certain problems with the organization were more likely to engage in cyberloafing (Henle & Blanchard, 2008). Another study focused on the act of cyberloafing and categorized the intensities of different cyberloafing activities and their perceived seriousness. Less serious acts of cyberloafing such as surfing news websites were the most prevalent activities while participating in online games was viewed as more serious and was less prevalent (Lim & Teo, 2005).
This study was conducted to gather students’ perceptions of employee cyberloafing. A collection of students’ perceptions will provide a different perspective on cyberloafing research. Current students will be future employees and their expectations on cyberloafing can be a signal toward the future. The students were asked about four main topics: 1) the prevalence and seriousness of various cyberloafing activities 2) the acceptability of cyberloafing in the workplace 3) the perceived amount of employees’ cyberloafing broken down into four position levels and 4) the student’s cyberloafing habits while studying. These four main topics were tested with relationships between gender and corporate experience.

This paper contains a literature review of research covering various studies on cyberloafing. A survey was conducted to gather data on students. It addresses students’ perceptions of the prevalence and seriousness of cyberloafing and students’ perceptions of employees’ cyberloafing habits. The responses were analyzed to find relationships with gender and prior corporate experience. The results focus on prevalence of cyberloafing and relationship with prior corporate experience, but other significant results will be discussed.
Literature Review

Cyberloafing Defined

The idea of “work” has been present for ages. Whether this relates to jobs such as farming, industrial work, or a desk job, it all falls under the umbrella term of “work.” Everyone may be willing to work, but just not as much as their employer may think they should. This gap of understanding or lack of willingness and motivation to perform one’s job one hundred percent of the time can lead to loafing. The quote, “A disinclination to work is as old as work itself,” summarizes this well (Kidwell, 2010, p. 543). There has always been and will be loafing where there is work. The dictionary definition of loafing is “to idle away time” (Loafing [Def.1 ], 2014). In the context of the workplace, this typically means employees are wasting time when they could be completing work. Loafing can take many forms, many of which are recognizable such as water-cooler conversations, frequent restroom breaks, and even just browsing the internet for one’s own pleasure. The latter has taken on the term of cyberloafing, and with the advancement of technology, has evolved into a unique type of loafing.

Cyberloafing is defined as “any voluntary act of employees using their company’s Internet access during office hours to surf non-work-related web sites for non-work purposes, and access non-work related email” (Jia, Jia, & Karau, 2013, p. 358). This is simply the use of a company’s internet for personal reasons during a time when an employer is expecting an employee to be working. The expected working time may vary from a typical eight to five day, but in general this is when employers expect employees to focus on tasks. Various research literatures have also used other terms to define this behavior. PWU (Personal Web Use) “is defined as any voluntary act of employees using
their company’s web access during office hours to surf non-work related websites for non-work purposes” (Anandarajan & Simmers, 2005, p. 776). Researchers have also used the term NWRC (Non-Work Related Computing) in studies that are similar to cyberloafing studies. One paper defined NWRC as “employees’ use of the Internet in their workplace for personal purposes” (Pee, Woon, & Kankanhalli, 2008, p. 120). This study will refer to Personal Web Use, Non-Work Related Computing, and other similar terms as cyberloafing due to the similarity of definitions and the similarities of the research conducted.

With the advent of the Internet, cyberloafing came into existence. It came with distinct advantages over other forms of loafing highlighted by Vivien Lim, “Employees can now not only engage in loafing on the job, they can literally enjoy the best of both worlds by maintaining the guise of being hard at work in the real world while in effect travelling through cyberspace by surfing websites for personal interests and purposes” (Lim, 2002, p. 675). Cyberloafing allows employees to loaf with the appearance of being at work. This is in contrast to other forms of loafing, such as talking with co-workers, or taking a long lunch break, where one can easily distinguish them from working.

Cyberloafing is a unique way to loaf that appears to allow employees an easier way to relax on the job. In addition to its unique characteristics, cyberloafing has a strong presence in the workplace. A survey by Websense.com found that the average American employee spent about 24 percent of his/her working hours on cyberloafing activities (Schings, 2014, p. 1). The American Management Association reported that more than 50 percent of all workplace related web activities are personal in nature (Anandarajan & Simmers, 2005, p. 776). Another study reported that “approximately 30 percent to 65
percent of internet usage at work is non-work related” (Restubog, et al., 2011, p. 247). Cyberloafing in a professional context represents a significant amount of the internet use at work. Jia, Jia, and Karau reported that around 90 percent of employees spent time at work surfing recreational websites (Jia, Jia, & Karau, 2013). There are several studies conducted over the past decade that have supported the high prevalence of cyberloafing.

**Consequences**

Research has viewed cyberloafing in both positive and negative contexts with the majority of research studying and focusing on the negative aspects of cyberloafing. This is partially due to the fact that several sources viewed cyberloafing as workplace deviance. V.K.G Lim and T.S.H Teo “categorized cyberloafing under the rubric of productions deviance, which includes relatively minor, organizationally harmful misbehavior, in the typology developed by Robinson and Bennett” (Lim & Teo, 2005, p. 1083). Production deviance in the form of loafing is a costly phenomenon that has existed in organizations since the beginning of time. Workplace deviance is clearly counter-productive, and when viewed in this light, researchers will study it in a negative context. Pablo Zogbhi-Manrique-de-Lara notes that, “given the literature cyberloafing is considered just one more type of conventional deviance, the same literature is very clear in assuming that cyberloafing is counterproductive” (Zoghbi-Manrique-de-Lara, 2012, pp. 469-470). This shows it is important to consider both the negative and potential positive aspects of cyberloafing while researching to avoid the negative bias of cyberloafing in most research.
There are many reasons to view cyberloafing as detrimental to the workplace. “It can cost organizations large amounts in term of lost productivity, increased security costs and network overload, and the risks of civil and criminal liability” (Anandarajan & Simmers, 2005, p. 777). If employees choose to cyberloaf, it is most likely in place of a productive task that they should be doing thereby lowering the employees’ productivity. Cyberloafing relates very much to the Productivity Paradox. Eastin defines this as “technologies initially thought to increase work productivity and effectiveness actually increase expenditures, training, and management costs” (Eastin, Glynn, & Griffiths, 2007, p. 436). One study reported that employees’ lose 30-40 percent of their productivity due to them surfing the Internet for personal purposes (Lim & Teo, 2005, p. 1082). The Internet and electronic devices intended to enhance productivity also allow for cyberloafing to occur. However, it has also created new distractions and opportunities to loaf in the workplace, which were not available before.

Many consider cyberloafing to be counter-productive. However, it is important to consider that there are other types of loafing available to employees as noted earlier, such as water-cooler conversations and long lunches. Other acts of loafing are available but employees do not necessarily use these forms loafing just as access to the internet does not necessarily make an employee commit the act of cyberloafing. However, “the temptation to do so is certainly higher since the internet makes it so much easier and convenient to loaf in this manner” (Lim, 2002, p. 678). Other acts of loafing are typically noticeable and can clearly show a decrease in productivity of an employee. Cyberloafing on the other hand is difficult to detect, and because of this, “it seems highly plausible that employees would take advantage of this evolved form of production deviance” (Lim,
The ability to appear to remain busy at work gives cyberloafing a strong advantage over other types of loafing. As several researchers have pointed out, it seems that because of availability and challenges for detection employees are likely to take advantage of it. This gives more reason and support to find the negative aspects of cyberloafing.

Several researchers attempt to shed light on some positive aspects of cyberloafing. Lim and Chen conducted a study that found that cyberloafing actually had a positive impact on individuals work (Lim & Chen, 2012, p. 351). Matthew Eastin notes, “while many scholars generally conceptualize cyberloafing as just one more type of conventional deviant behavior at work, others consider this activity to be innocuous or even productive” (Eastin, Glynn, & Griffiths, 2007). Eastin argues that the previous literature in research that has defined cyberloafing under deviance was not conclusive in regards to the negative effects of cyberloafing. Studies have made cases for both the positive and negative effects of cyberloafing, and this is because cyberloafing is a generic term for a type of loafing. There are many different types of cyberloafing activities that range in perceived seriousness, and the effects of these activities on employees can vary. Christine Henle stressed that, “some types of cyberloafing may be constructive… while others may be destructive” (Henle & Blanchard, 2008, p. 395). Another article highlighted a study conducted by J.Q. Chen. “Their research shows that although non-work-related e-mailing can, in fact, be detrimental to employee affect, internet browsing may actually be a positive activity” (Schings, 2014, p. 1).
Causation of Cyberloafing

The advent of the internet has allowed cyberloafing to take place, but other circumstances or influences can promote and even discourage the use of cyberloafing. As technology has continued to increase the amount of devices available to employees, so has the capability and the expectations to work at home increased. A study by Lim and Teo showed that “[working adults] spent an average of 4.5 hours per week at home on work-related activities… [And] spent an average of 3.2 hours per week using company Internet access on personal activities” (Lim & Teo, 2005, p. 1088). Another study showed even more time spent at home on work activities at 5.9 hours per week (Lim & Teo, 2005, p. 1088). This shows that even though employees may choose to cyberloaf at work, they are spending even more time on work activities at home. Employees may think that they are doing more than enough work outside of working hours, and therefore feel free to loaf during working hours. Anandarajan and Simmers stated, “[Cyberloafing] permits accomplishing personal tasks that are displaced as work demands spread out beyond the traditional eight-hour day, five day a week work schedule” (Anandarajan & Simmers, 2005, p. 777). This may be one main cause behind the high prevalence of cyberloafing.

Influences of cyberloafing go beyond external forces such as work hours. In addition to the external, “Cumulative research has shown that personality traits do play a powerful role in explaining a multitude of individual attitudes and behaviors in the workplace” (Jia, Jia, & Karau, 2013, p. 359). One of these behaviors in the workplace is cyberloafing. Jia, Jia, and Karau studied the impact of personality, specifically the Big Five, on employee’s cyberloafing habits. The Big Five are five traits that describe human
personality. Previous research had shown that “The Big Five have been found to predict the amount of individual internet use by college students” (Jia, Jia, & Karau, 2013, p. 359). This indicated that The Big Five personality traits would have a high chance in predicting cyberloafing as well. It is important to note that Jia, Jia, and Karau found it necessary to control for employee’s age and gender since these were both significantly related to cyberloafing, “younger, male workers were more likely to loaf on the Internet than older, female employees” (Jia, Jia, & Karau, 2013, p. 361). Three of the Big Five traits, extroversion, conscientiousness, and emotional stability, all significantly related to cyberloafing. Extroversion positively related to cyberloafing, while conscientiousness and emotional stability negatively related (Jia, Jia, & Karau, 2013).

Gender and Age are other internal influences on individuals that have a relation to cyberloafing. Past research has generally supported the notion that males are more likely to cyberloaf than females, although for several different reasons. One reason behind this is simply because males were found to use the internet more often than females (Zhang, 2004). Another study believed that males “were more likely to experience resource gain in that they are able to cyberloaf with greater ease, derive more pleasure from engaging in such activities and are better able to apply seemingly non-work-related information they obtained from surfing the net to specific work goals” (Lim & Chen, 2012, p. 351). This explanation is suggesting that males participate in cyberloafing more because they can take advantage of its benefits more than females. Another study suggested that men were more confident in using the internet as a resource for their own entertainment, and in turn women were less confident and would have a negative attitude towards cyberloafing (Schings, 2014, p. 2). There is a general consensus on the relationship of age to
cyberloafing in that it is negatively related (Restubog, et al., 2011, p. 248). Younger people typically have higher rates of cyberloafing than older people. This can been attributed to a multitude of reasons with one of the main ones being familiarity with the technology. However, there are certain circumstances where age has actually been shown to be positively related to cyberloafing. One study found that “older employees engaged in more cyberloafing compared to younger employees” (Restubog, et al., 2011, p. 251).

This specific study was conducted at a university, and the researchers suggested that older employees tended to be tenured, and were therefore less concerned about minor forms of cyberloafing. This implies that greater comfort ability and job security at a company could increase the tendency for minor cyberloafing activities.

The work environment can also play a factor in influencing cyberloafing. Various stressors in the workplace have been shown to promote or discourage cyberloafing based on the effects of those stressors on the employees. Henle and Blanchard described three main role stressors that can interfere with an employee’s productivity or success: role ambiguity, role conflict, and role overload.

Role ambiguity is defined as uncertainty regarding job duties and expectations… role conflict refers to incompatible demands in the workplace and can include conflicts between work demands and one’s personal values… role overload is the extent that employees are required to do more work than can reasonably be expected in a given time period (Henle & Blanchard, 2008, p. 385).

These stressors were shown to be “detrimental to employee well-being, satisfaction at work, and job performance” (Henle & Blanchard, 2008, p. 385). Henle and Blanchard found that greater role ambiguity or role conflict led to higher rates of cyberloafing while role overload led to less cyberloafing.
The fact that role overload contributes to less cyberloafing can be attributed to the notion that cyberloafing is typically a stimulating activity. “The surfing patterns in certain individuals showed an increase in stress showing that cyberloafing is a stimulating activity” (Eastin, Glynn, & Griffiths, 2007, p. 441). Individuals can be exposed to an overwhelming amount of information from the internet which contributes even more to the stimulation of surfing the web (Hu, Zhang, Dai, & Zhang, 2012). Role overload can cause stress and overstimulation, and therefore an employee would not need any more stimulation. On the other end of the spectrum, role ambiguity can be related to boredom defined as, “unpleasant, transitive affective state in which the individual feels a lack of interest in and difficulty concentrating on the current activity… and feels that it takes conscious effort to maintain or return attention to that activity” (Eastin, Glynn, & Griffiths, 2007, p. 437). The boredom associated with role ambiguity motivates individuals to find a stimulating activity. This indicates that the ideal “solution” for an employee’s role ambiguity, or boredom, is a mentally stimulating activity. The employee will often choose cyberloafing as a means for stimulation.

The relationship between an employer and his or her employees has also been related to cyberloafing. Lim noted that “existing research has shown that distributive justice does play a significant role in influencing employees’ perceptions of whether the employment relationship is a fair one” (Lim, 2002, p. 679). This shows that if an employee perceives a work environment does not promote equality, that employee will believe the employment relationship is an unfair one. Research has shown that “when employee perceptions of fairness are violated, employees are more likely to cyberloaf as a means of reinstating justice into the social exchange relationship” (Jia, Jia, & Karau,
2013, p. 358). The result of the unfairness will be a less productive relationship with the employee wanting to counteract the unfairness with misconduct or counterproductive behaviors, often leading to cyberloafing (Restubog, et al., 2011, p. 248).

**Types of Cyberloafing Activities**

Certain circumstances were said to promote cyberloafing activities. There are many different activities that fall under the category of cyberloafing and they can be sorted based upon their relative seriousness and prevalence. Lim and Teo have conducted surveys asking groups of working adults on their perceptions of cyberloafing activities. They found that the perceived seriousness and the prevalence of an activity were inversely related (Lim & Teo, 2005, p. 1087). Surfing various types of websites such as entertainment, sports, and news sites were the most prevalent activities and also rated among the least serious. Personal email usage was also reported as less serious with receiving email being the most prevalent and sending email the least. Shopping online, looking for employment, and playing online games were the least prevalent activities and rated the most serious (Lim & Teo, 2005, p. 1086; Lim & Chen, 2012, p. 350). The inverse relationship between seriousness and prevalence suggests that employees are more likely to justify the activities that are less serious.

**Justifications of Cyberloafing**

A typical act of loafing is committed because an employee can justify that act in their own mind. Justifications of cyberloafing have been collected in previous surveys as well as how many employees find it acceptable to cyberloaf. The majority of respondents
to two different studies indicated that it was acceptable to cyberloaf in the workplace (Lim & Chen, 2012; Lim & Teo, 2005). An average of about half an hour of activity was shown to be acceptable during the work day (Lim & Teo, 2005). As the majority of employees find it acceptable to cyberloaf, they have various justifications that allow them to deem a cyberloafing activity as such. One common reason is simply that everyone else is doing it. Informal social norms can influence employees’ decisions and an atmosphere that accepts cyberloafing will make it much easier for an employee to justify cyberloafing.

Using cyberloafing as a form of retaliation against the employer is another common justification. In general, “employees are more likely to engage in misconduct when they perceive their employers to have been unjust in their treatment or in the allocation of outcomes. For instance, Greenberg found that employees reacted to pay cuts which they perceived to be unfair by engaging in theft” (Lim, 2002, p. 679). When employers do not give rewards or fair treatment to an employee, the employee will likely act against this unfair treatment to equalize the situation (Lim, 2002). According to a survey conducted by Lim & Teo, “89 percent of our respondents reported that it was acceptable to cyberloaf if they had been unjustly treated, and another 95 percent reported that it was acceptable if they are underpaid (Lim & Teo, 2005, p. 1088). This suggests that most cases of unfair treatment will result in cyberloafing and provides an easy justification for employees.

On the opposite end of retaliation, other justifications follow that cyberloafing does not have a big impact and therefore it is acceptable. Minimization is a common example of this. If it is only for a few minutes, then it will most likely not hurt anyone
In one survey, “the majority of respondents agreed it is acceptable for them to use the Internet for non-work related reasons if they put in extra effort to find enough information to get the job done, or if they have to conduct overtime work without compensation (Lim, Teo, & Loo, 2002, p. 69). Some respondents in Lim, Teo, and Loo’s survey gave written responses. Some of them alluded to that as long as they completed their work, that it was acceptable to cyberloaf. From the employees’ perspective, if they do not do it too often, and it does not get in the way of their main tasks, then it is acceptable to cyberloaf.

Organizational Implications

There is no doubt cyberloafing is present in today’s business world. The question is now what is the impact on organizations and what should they do about it? One common step to curb a type of behavior is to create policies that define what is acceptable in the work place. A policy could state that certain types of activities are unacceptable or even rule out all types of cyberloafing. According to Kidwell, “These types of policies can be effective at controlling cyberloafing in all three types of organizations, but must be designed and enforced in a fair manner” (Kidwell, 2010, p. 549). If policies are not enforced fairly from the employees’ perspective, then the policy will likely be ineffective. Regardless of the details in the policy, if employees perceived that there would be organizational sanctions for cyberloafing, then they would be less likely to commit that act (Henle & Blanchard, 2008). In turn, if employees perceive that there will not be organizational sanctions, then they will be more likely to cyberloaf (Henle & Blanchard,
It is important for an organization to know that a policy itself does not counteract the behavior of cyberloafing, but rather it is the enforcement of that policy. Attempted enforcement of a policy is ineffective unless paired with an effective communication of that policy. In one study, even though eighty-seven percent of companies had policies, over eighty-two percent of respondents reported that they did not know of anyone that had been disciplined for cyberloafing related activities (Lim & Teo, 2005). This indicates that the policies that were in place were not communicated effectively to employees. If enforcement of the policy is taking place, but a majority of employees are still unaware of that policy, it is essentially ineffective.

Sanctions may be made against cyberloafing through policy, but as Kidwell referenced, the use of the internet for company or personal use can be blurry (Kidwell, 2010). Directly monitoring employees’ internet usage can be used in addition to policies. However, this method requires additional resources to implement, but even more costly could be damage to employee relationships if the monitoring is not carried out properly. According to Loo Geok Pee, “monitoring employees’ computer usage can adversely affect their privacy perception and job satisfaction and consequently reduce productivity” (Pee, Woon, & Kankanhalli, 2008, p. 120). Monitoring employees creates more control from the employers’ standpoint, but it may actually result in a loss of productivity in the long run.

In addition to formal policies and communication channels, the informal environment can have an impact on the prevalence of cyberloafing. The environment that employees have established outside of the formal channels will typically have a large influence on behaviors and level of productivity. Henle and Blanchard found that
“Informal co-worker sanctions such as discouraging or avoiding the individual committing deviance or informing those in authority, carried more weight in reducing counterproductive work behaviors than did formal organizational sanctions” (Henle & Blanchard, 2008, p. 396). This suggests that the informal environment could possibly have an even greater effect on cyberloafing tendencies than any formal policies that could be created. This makes it just as important for an organization to promote the correct culture in addition to enforcing any policies it has implemented.

Employees that have been in the work force will have a more accurate perception of cyberloafing in the workplace than a student at a university. In the same way, a student that has had corporate experience would have a more realistic perception of cyberloafing in the workplace. In addition to being exposed to the internet growing up, students are in an environment where cyberloafing is much more prevalent and would have a skewed perception of cyberloafing in the workplace.

Hypothesis 1: Students with corporate experience will report a lower perceived prevalence of cyberloafing than students without corporate experience.

Past research has shown that males were more likely to cyberloaf. This would be likely to carry over into students’ perceptions of cyberloafing. If males cyberloaf more than females, then it would make sense that they would perceive a greater amount of cyberloafing based on their own perception.

Hypothesis 2: Men will perceive that employees spend more time cyberloafing.

As cyberloafing is broken down into different activities, the activities range in how harmful these can be to the organization or an employee’s productivity. In general, more serious offenses of any type of frowned upon activity are generally less prevalent
due to the greater punishment often associated with those activities. This should be the case for cyberloafing activities as well, the more serious or damaging an activity can be the less prevalent it should be.

**Hypothesis 3:** There will be a negative relationship between an activity’s seriousness and an activity’s prevalence.

Just as students without corporate experience are expected to perceive a higher amount of cyberloafing than student with that experience, it would be expected that students would perceive a high amount of acceptability of cyberloafing in the workplace that would coincide with the amount cyberloafing perceived.

**Hypothesis 4:** Students will perceive the amount of acceptable cyberloafing to be similar to the amount of cyberloafing they perceive will occur in the workplace.

Higher position levels in the company generally have more strategic or managerial duties than entry level or non-management position levels. Students will note this difference and perceive that these non-management positions have less responsibilities and therefore less work as these are the positions most relatable to the students themselves. If they think that these positions have less work to do they will assume that there will be a higher prevalence of cyberloafing.

**Hypothesis 5:** Students will perceive the non-management position level to spend a higher percentage of their time cyberloafing than the other position levels.
Methods

Subjects

Data were collected from students at a southwestern private university. The majority of respondents were classified as sophomores in the business school. These students serve as an appropriate audience for studying perceptions of cyberloafing because it is highly likely that all of these students have been exposed to the internet and are aware of the concept of cyberloafing. A questionnaire was used to obtain data for analysis. The questionnaire was created in Qualtrics and distributed via a hyperlink through an email. A total of 253 students were emailed the questionnaire and 210 responded, for a response rate of 83%. The respondents consisted of 56.4% males and 43.6% females. Over 84% of the respondents were sophomores. Respondents were also asked if they were currently or had previously worked in a corporate environment, of which 45.5% responded saying that they had. The main goal of this sample was to provide a narrow demographic that focuses on sophomore university students.

Questionnaire

The surveys were created in Qualtrics and distributed via a hyperlink through an email. The first section of the survey on seriousness vs. prevalence was taken from “Prevalence, perceived seriousness… An exploratory study,” by Lim and Thompson. The results of this section would be compared against this previous study. The survey also includes another question of how many minutes students think are acceptable for employees to cyberloaf. This question was also directly comparable to the previous study.
The survey also went further in depth by asking about the cyberloafing habits of different positions levels within companies.

Perceptions of the seriousness of cyberloafing activities were measured with item A.1 from Lim and Thompson (2005). Respondents were asked to select their perceived prevalence of various employee cyberloafing activities. There were six answer options to choose from: Never (0), A few time per month (1), A few times per week (2), Once a day (3), a few times per day (4), and Constantly (5). The prevalence variable was tested for reliability using Cronbach’s Alpha and recorded a result of 0.89 which indicates good internal reliability.

Perceptions of the prevalence of cyberloafing activities were measured with item A.2 from Lim and Thompson (2005). Respondents were asked to select their perceived seriousness of various employee cyberloafing activities. There were six answer options to choose from that ranged from not at all serious (0) to most serious (5). The seriousness scale was tested for reliability using Cronbach’s Alpha and recorded a result of 0.88.

Students were asked to give their opinions on how much time they thought employees spent on cyberloafing. Respondents were asked if they thought cyberloafing was acceptable as well as how many minutes they thought would be acceptable per day. Respondents were also shown four slider bars with percentages ranging from zero to one hundred representing the percentage of time that students expected the employees to cyberloaf. The four slider bars represented four different position levels: Senior Management, Middle Management, First Level Management, and Non-Management. In addition to employees’ cyberloafing, they were also asked about their own cyberloafing
frequency during studying. Respondents answered with how many minutes per hour of studying were used to cyberloaf.

Respondents were given three options on what they felt most closely represented the reason that it is acceptable for an employee to cyberloaf. These three options represented the ideas of normalization, minimization, and super ordination. The option that represented normalization stated “most people already participate in cyberloafing.” The option that represented minimization stated “cyberloafing activities do not take much time away from my work.” The option that represented super ordination stated “I cyberloaf in response to unjust treatment.”
Results

Seriousness & Prevalence of Cyberloafing Activities

As indicated in Table 1 the most serious activities were looking for employment (3.29) and playing online games (3.18). The least serious activities were looking at general news websites (1.25) and non-job related financial websites (1.49).

The most prevalent activity was receiving non-work email with a mean of 3.35. Out of twelve activities, the top seven had means within 2.91 and 3.35. This is a small difference that averages around a prevalence of once a day. The least prevalent activities were looking for employment (1.14) and playing online games (1.40). These activities were much less frequent than the others averaging closer to a few times per month.

There were no statistically significant relationships found between the average prevalence and average seriousness of each activity. The results of all activities for prevalence and seriousness are shown below in Table 1 and Graph 1.

<table>
<thead>
<tr>
<th>Cyberloafing Activity</th>
<th>Look for employment</th>
<th>Play online games</th>
<th>Download Information</th>
<th>Instant Messaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seriousness of Activity</td>
<td>3.29</td>
<td>3.18</td>
<td>2.94</td>
<td>2.60</td>
</tr>
<tr>
<td>Prevalence of Activity</td>
<td>1.14</td>
<td>1.40</td>
<td>1.95</td>
<td>2.55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cyberloafing Activity</th>
<th>Entertainment Websites</th>
<th>Other Websites</th>
<th>Sports Websites</th>
<th>Send Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seriousness of Activity</td>
<td>2.17</td>
<td>2.08</td>
<td>2.07</td>
<td>1.93</td>
</tr>
<tr>
<td>Prevalence of Activity</td>
<td>2.91</td>
<td>3.14</td>
<td>2.94</td>
<td>3.03</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cyberloafing Activity</th>
<th>Check Email</th>
<th>Receive Email</th>
<th>Financial Websites</th>
<th>News Websites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seriousness of Activity</td>
<td>1.84</td>
<td>1.66</td>
<td>1.49</td>
<td>1.25</td>
</tr>
<tr>
<td>Prevalence of Activity</td>
<td>3.18</td>
<td>3.35</td>
<td>2.28</td>
<td>2.97</td>
</tr>
</tbody>
</table>
Graph 1 – Displays students’ perceptions of cyberloafing activities

Time Spent Cyberloafing

Over 93% of students responded that they took breaks during studying to cyberloaf while just fewer than 50% of students said it would be acceptable to cyberloaf in the workplace. On average students thought it would be acceptable to spend 35.8 minutes per eight hour day on cyberloafing at work. On their study habits, respondents said they spent around 14 minutes on cyberloafing per hour of study. The equivalent of this in an eight hour day would be 112 minutes.

A comparison of the perception of time spent cyberloafing based on position levels within a company was assessed by asking what percentage of their day would that employee spend cyberloafing. In this study, students perceived on average employees at
the senior management level would spend 24.7% of their day cyberloafing, middle management 25.02%, first level management 27.44%, and non-management 37.07%. These position level means were tested for significant differences using an independent sample t-test. Non-management had the highest amount of perceived percentage (t = 5.570, p < .01).

When asked about the justifications of cyberloafing 46.2% of respondents chose the statement that represented normalization. 50.5% of respondents chose the statement that represented minimization. Only 3.4% of respondents chose the statement that represented super ordination.

Gender and corporate experience were tested for significance on the main factors of this study using t-tests. This includes prevalence and seriousness of cyberloafing activities, the average acceptable minutes of cyberloafing, the expected cyberloafing of the position levels and the amount of cyberloafing during studying. Gender was found to have significant differences on the responses related to first level management (t = -2.156, p < .05) and non-management (t = -3.596, p < .01) with females reporting a higher amount of perceived cyberloafing. Corporate experience was found to have significant difference in the reported average prevalence of cyberloafing activities (t = -2.078, p < .05).
Discussion

There are several main findings in this study that can be expanded upon in future research. These include findings on the variables of corporate experience and gender, the trends of the prevalence of seriousness of cyberloafing activities, and the findings on the amount of perceived time employees’ spent cyberloafing.

Corporate Experience

Students with prior corporate experience reported a statistically significant lesser average prevalence than students without corporate experience which supports hypothesis 1. This demonstrates that the corporate experience that these students had provided a different perspective on cyberloafing in the workplace. Working in a corporate environment provided a more detailed view of individual cyberloafing activities thus a more realistic account of actual cyberloafing than their peers. This shows that the different cyberloafing activities actually had less prevalence than the students without corporate experience perceived. However, the most common form of corporate experience for students is through internships which are different from full time positions. Using an internship as a gateway to a full time job, a student would be more likely to work harder and impress his/her supervisor and co-workers and thus cyberloafing would be avoided. Students in internships are typically under much greater supervision than a full time employee because of their lack of experience. Greater supervision would limit the amount of time a student could cyberloaf at work but it would also limit their exposure to cyberloafing as well. An employee or supervisor that is monitoring an intern would be more likely to avoid cyberloafing in order to provide a
better impression. These are the factors that may have contributed to a decreased prevalence from prior corporate experience.

**Gender Differences**

Females reported a statistically significant higher perceived amount of time spent cyberloafing for both first level management and non-management employees which does not support hypothesis 2. Prior research had concluded that males were more likely to cyberloaf. However, it is important to note that the results of this study are not directly comparable to past studies that collected actual employee cyberloafing information instead of students’ perceptions. It was difficult to compare this gender difference result to past research as well as find the reasoning behind this. One possible reason for the increased perception of females is the difference in online shopping between males and females. Females generally spend more time shopping online than males which may account for the skewed perception on the amount of cyberloafing. Online shopping was not included in the list of cyberloafing activities that were tested for their prevalence and seriousness. This missing factor could very well be the driver behind the females’ higher perceptions.

**Seriousness and Prevalence of Cyberloafing Activities**

It was expected that as the seriousness of an activity increased, perceptions of its prevalence would decrease. Hypothesis 3 is not supported by the results, however in the four most serious activities: instant messaging, downloading information, playing online games, and looking for employment, the trend of decreased prevalence with an increase
in seriousness appeared to be present. The other activities that are related to visiting various types of websites or the use of personal email average around the same amount of prevalence despite their seriousness. The most serious activities are typically the most damaging either to the organization or to the employees’ productivity. Ultimately these results show that organizations should not have as many occurrences of the most serious activities that could be the most threatening.

**Gap between Acceptable Time and Perceived Time**

Student respondents on average reported the acceptable amount of cyberloafing in the workplace at around 7.5% or around 35 minutes per eight hour work day which did not support hypothesis 4. This amount of acceptability is much lower than any of the students’ perceptions on all of the position levels. This indicates that students’ overall perception of the workplace is that the acceptability standard is largely ignored. Students must believe that many employees justify their cyberloafing with normalization reasoning. This is confirmed in the responses in this survey with just under 50% of respondents reporting that normalization is an acceptable reason to participate in cyberloafing.

**Perceived Amount of Cyberloafing for the Non-management Position Level**

The non-management position level had the statistically significant highest perceived average amount of time an employee would spend cyberloafing at 37% compared to around 26% for the other three positions combined which supports hypotheses 5. Students may perceive that non-management (entry level) employees have
more free time because they have less managerial or strategic duties than the higher level positions. These students will graduate in the next few years and move into these lower level positions of which they perceived a high amount of cyberloafing. Students’ current cyberloafing habits relate to studying, and on average these students spent 23% of their study time participating in cyberloafing. With students’ current habits and their perception of non-management employees, it would seem very likely that these students will continue to cyberloaf as they move into the workforce. If this is the case, organizations will need to continue to focus on reducing cyberloafing moving forward.
Implications

If cyberloafing is going to remain prevalent in organizations, it is essential that organizations continue their efforts to curb the participation. If the amount perceived cyberloafing in this study held true in a real corporate environment there would be a much needed reduction in cyberloafing due to the negative impact it can have on employees’ productivity and ultimately the organization. There are three different methods that can be used simultaneously to reduce cyberloafing: the use of formal policies, employee monitoring, and managing the informal work environment.

Implementing formal policies is the most common method used to reduce cyberloafing. In addition to writing a formal policy it is just as critical to effectively communicate and enforce that policy. A formal policy outlines what forms of cyberloafing are acceptable and how much these forms would be acceptable. This becomes ineffective if employees do not know about this policy. It is important to effectively communicate the policy to all employees so that they are aware of the standards set by the organization. Enforcement is just as much as important as communication of a policy. If employees are aware of the policy but know that there are no consequences for their actions, they will be much more likely to participate in cyberloafing. How the policy will be enforced must be clear and the organization must be ready to carry out the enforcement as necessary.

Monitoring employees’ internet usage can be effective way to curb cyberloafing and is another popular method used. It is important for an employee to know that he or she is being monitored and how the monitoring is being performed. A lack of communication on this matter could hurt an employee’s perception of privacy in the
workplace and ultimately hurt the relationship between the employee and the organization. The line between cyberloafing and an employee using the internet for his job may be blurry. Many employees utilize the internet for information related to their job every day and this activity could be misinterpreted as cyberloafing. An organization must keep this in mind as this makes it more difficult to monitor employees’ internet usage.

Managing the informal environment correctly can significantly reduce the amount of cyberloafing and may be more effective than the previous methods. An employee’s colleagues will influence the behaviors and habits of that employee. If established employees do not cyberloaf and are productive workers, new employees will most likely want to do the same. Employees work habits are essentially a product of the culture in a company. In addition to fostering a productive culture, reducing certain role stressors will also reduce cyberloafing. Reducing role conflict and mainly role ambiguity will aid in eliminating unnecessary cyberloafing from the workplace. Clearly defining an employee’s role and duties will give that employee purpose and enough work to reduce the temptation of cyberloafing.
Conclusion

The main limitation of my study was the homogeneity of the survey respondents. Excluding the fact that this study mainly focused on sophomore university students, the sample of students was fairly similar. All of the respondents were in a private southwestern university business school and most students were taking similar classes. For extended research on student perceptions it would be necessary to expand to a larger overall sample within the private southwestern university and also expand to other universities. Increasing the diversity of the sample to include all classifications of students would allow perceptions of cyberloafing to be compared among the classifications and a determination of whether perceptions change as students advance through the university. The inability to obtain a corporate sample did not allow for this study to compare students’ perceptions of employees’ habits directly to an actual employee sample. Companies are becoming stricter on allowing employees to respond to surveys and those allowed are typically limited to major research companies such Gartner or Forrester.

Further research on students’ perceptions of cyberloafing needs to include a better sample of university students as well as a directly comparable study of actual employees’ cyberloafing habits. One way that this could be addressed would be to follow students from the time they start at the university and go into the work force. Tracking a student’s cyberloafing perceptions and then comparing those perceptions to that student’s actual cyberloafing in the workplace would add tremendous value to this research. This is the next step in cyberloafing research as students are the next generation of the work force and the habit of cyberloafing will start with them.
Appendix

Default Question Block

Disclaimer

This is a confidential and anonymous survey that cannot be traced back to any student. The purpose of this survey is to collect data for a Senior Honors Thesis at TCU on your perceptions of the prevalence of cyberloafing in the workplace. The anonymous data will not be shared with any other students other than the student and his thesis professors. Please answer the following questions regarding cyberloafing activities.

What is cyberloafing?

Cyberloafing is the act of employees using their companies’ Internet access for personal purposes during work hours. This includes all devices such as laptop, mobile phone, tablet, etc., that are accessible to the employee. It is still considered cyberloafing even if an employee is not directly using a company’s network to access the Internet such as the use of personal mobile device as long as the activity is taking place during normal working hours. There are many ways that employees can use the company’s Internet to engage in cyber activities during working hours at the workplace. The questions below highlight some of these activities.

Are you currently or have you in the past worked in a corporate environment? (excludes jobs like working as a salesperson in a retail shop, working as a waiter, etc.)

☐ Yes
☐ No

In your most recent job, what was the title of your position?


During office hours, how often do you think an employee uses the Internet at work to access the following websites for personal reasons.

<table>
<thead>
<tr>
<th>Visit non-job related financial websites</th>
<th>Never</th>
<th>A few times per month</th>
<th>A few times per week</th>
<th>Once a day</th>
<th>A few times per day</th>
<th>Constantly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit general news websites</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Visit entertainment related websites</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Visit sports related websites</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Visit other websites</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Instant messaging/chat online (IRC)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Download non-work related information</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Look for employment</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Play online games</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Check non-work related e-mail</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Send non-work related e-mail</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Receive non-work related e-mail</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Some cyber activities are considered to be very serious, others not so serious, in terms of their consequences to the company (cost, time lost, productivity lost). We are interested in your opinion about how serious each type of cyber activity is.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not at all serious</th>
<th>Minimally Serious</th>
<th>Slightly Serious</th>
<th>Somewhat Serious</th>
<th>Very Serious</th>
<th>Most Serious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit non-job related financial websites</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
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<td>Visit general news websites</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Visit entertainment related websites</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Visit sports related websites</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Visit other websites</td>
<td>☐</td>
<td>☐</td>
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<td>☐</td>
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<td>Instant messaging/chat online (IRC)</td>
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<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Download non-work related information</td>
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<td>☐</td>
<td>☐</td>
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<tr>
<td>Look for employment</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Shop online</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Play online games</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Check non-work related e-mail</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Send non-work related e-mail</td>
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</tr>
<tr>
<td>Receive non-work related e-mail</td>
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<td>☐</td>
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<td>☐</td>
</tr>
</tbody>
</table>

Do you think it is acceptable to use the company’s Internet access for non-work purposes during working hours at the workplace?

☐ Yes

☐ No

Please select the reason that most closely represents why you feel that it is acceptable for employees to use the company’s Internet access for non-work purposes during working hours at the workplace?

☐ Most people already participate in cyberloafing

☐ Cyberloafing activities do not take much time away from my work

☐ I cyber loaf in response to unjust treatment (Underpaid, Expected to work too many hours, etc...)

I feel that it is acceptable for full-time employees to use company’s Internet access for non-work purposes during working hours insofar as it does not exceed ______ minutes per day. (Please input a number in the box below)
Of the position levels below, what percentage of time during an eight hour work day do you think an employee spends cyberloafing.

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
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</thead>
<tbody>
<tr>
<td>Senior Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Management (Director)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Level Management (Manager)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

While studying, do you surf the Internet to take breaks?
- [ ] Yes
- [ ] No

For every one hour of studying, how many minutes do you spend on the Internet for personal use (unrelated to studying)?

[ ]

In which industry did you most recently work?
- [ ] Government
- [ ] Healthcare
- [ ] Information Technology
- [ ] Manufacturing
- [ ] Financial Services
- [ ] Aerospace/Defense
- [ ] Retail
- [ ] Consulting
- [ ] Other
In which area did you most recently work?
- Finance/Accounting
- Sales
- Customer Service
- IT
- Supply Chain
- Marketing
- Research and Development
- Human Resources
- Other

What level was/is your most recent position?
- Senior Management
- Middle Management (Director)
- First Level Management (Manager)
- Non-Management

What was/is your most recent employment type?
- Full-Time
- Part-Time
- Intern

What is your age?
- Below 19
- 19 - 25
- 26 - 30
- Above 30

What is your gender?
- Male
- Female
What is your classification?
- [ ] Freshman
- [ ] Sophomore
- [ ] Junior
- [ ] Senior

What is (are) your major(s)?
- [ ] Accounting
- [ ] Business Information Systems
- [ ] Entrepreneurial Management
- [ ] Finance
- [ ] Marketing
- [ ] Supply and Value Chain Management
- [ ] Pre-Business
Works Cited


