

## Are employees cyber loafing while working from home? Influence of demographic and organizational factors on cyber loafing behaviour

**Saji GEORGE**

Mahatma Gandhi University, Kerala  
Rajagiri College of Social Sciences  
saji@rajagiri.edu

**Dr. Jhoney JOHNSON**

Mahatma Gandhi University, Kerala  
j.jhoney@gmail.com

**Dr. Karthika DEVAN**

Vishwakarma University, Pune  
karthika.devan@vupune.ac.in

**Abstract.** *Cyberloafing is a term that defines the behavior amongst staff who are involved in the usage of the internet and gadgets for non-work-associated purposes during their work periods. This study aims to understand how demographic and organizational factors relating to job overload, intrinsic and extrinsic motivation affect cyberloafing intensity. The demographic variables age and gender were controlled throughout the study and later analyzed for possible Cyberloafing behavior links. This topic has been of great importance during the COVID-19 period, forcing many employees to work from home. These conditions have shown greater degrees of Cyberloafing with easy access to gadgets and the internet. A structured questionnaire using a five-point Likert scale was circulated through online mediums among male and female IT employees in Kerala exposed to cyber deviancy during their work from home situation to fulfill these factors. Three hundred seventeen responses were collected and analyzed using Structural Equational Modelling using Smart PLS 3 software. The findings observed were that job overload positively affects Cyberloafing, while intrinsic and extrinsic motivation does not significantly affect Cyberloafing. The effect of generation difference and gender on Cyberloafing does exist and shows significance to Cyberloafing behavior. This research can be used for further studies concerning Cyberloafing antecedents. The topic is gaining greater importance with the changing perception towards work from home culture and millennials' attitudes and thus be used to identify the factors impacting such a situation and help take proper actions to reduce counterproductive behaviors. It will also provide a base for further insights as it is not explored by many and studied in a pandemic context.*

**Keywords:** cyberloafing, job overload, intrinsic motivation, extrinsic motivation.

**JEL Classification:** M1, M5, M50, L84.

## 1. Introduction

In the face of an unprecedented global challenge, the COVID-19 pandemic has rapidly transformed the traditional workplace, enforcing an abrupt shift towards remote working conditions. While necessary, this compulsory transition to a home-based work environment has presented novel obstacles in managing employee productivity and engagement. A pressing concern in this new working paradigm is the misuse of the Internet and technological devices for personal needs during professional hours, a behavior known as 'cyberloafing'.

With the advent of the digital era and an increasing reliance on information and communication technology (ICT), cyberloafing has drawn the attention of organizational researchers and human resource practitioners alike. As employees enjoy unlimited access to the Internet and gadgets in the comfort of their homes, a significant rise in this counterproductive work behavior can be observed. This study, "Are Employees Cyber Loafing while Working from Home? Influence of Demographic and Organizational Factors on Cyber Loafing Behaviour" explores the factors instigating such conduct, considering the role of demographic elements like age and gender, along with organizational aspects such as job overload and motivation.

Cyberloafing, with its potential to harm organizational resources and productivity, requires thorough understanding. This research fills this knowledge gap by uncovering the causes of such deviant behaviour among IT employees who have found themselves immersed in a work-from-home scenario during the COVID-19 crisis, primarily in Kerala. By unraveling the underlying causes of cyberloafing, the study aims to devise preventative measures to ensure organizational efficiency and individual productivity, thereby contributing to the existing body of literature.

This comprehensive research effort is structured into several integral sections. Following this introduction, the paper delves into a review of pertinent literature on cyberloafing, explicitly focusing on the IT industry. Subsequently, we present the study's theoretical framework and research model. This is followed by a detailed description of the methodological approach adopted, after which we proceed to data analysis and presentation of the findings. In conclusion, the paper discusses the potential implications of the study, suggests avenues for future research, and presents an overall summary of the work.

This exploration into the world of cyberloafing, with its emphasis on demographical and organizational factors, is anticipated to illuminate the intricate dynamics of this phenomenon. The insights gleaned from this study will serve as a foundation for future research endeavors and practical interventions to curb cyberloafing, thereby fostering a balanced and productive digital work environment.

## 2. Background literature

Workplace behavior, particularly in the digital realm, is a complex interplay of many factors that vary in nature and impact. The pervasiveness of technology in work environments has given rise to counterproductive behaviors that manifest in various forms,

with cyberloafing being a prominent concern. According to Weatherbee (2010), the misuse of technology at work spans a continuum from relatively benign instances of cyberloafing to more disruptive forms like cyber aggression.

Cyberloafing, as defined by Lim (2002), refers to the intentional act of an employee using their company's or personal internet access for non-work related purposes during work hours. Although seemingly innocuous, this behavior can lead to significant productivity losses and morale issues within an organization.

The literature provides ample support for the influence of multiple variables on cyberloafing behavior. A key focus in this regard is the role of demographic characteristics such as age and gender, which have been found to impact the intensity of ICT usage (Zhang, 2005). Age and gender differences in cyberloafing behavior might be linked to differential digital literacy, attitudes toward technology, and perceptions of acceptable online behavior during work hours.

Job overload is another factor that merits attention, a frequent organizational issue that may spur employees to engage in cyberloafing as a form of respite or escape (Henzel & Kacprzak, 2020). Overburdened by excessive work demands, employees might resort to online distractions as a means to cope, thus resulting in instances of cyberloafing.

Furthermore, intrinsic and extrinsic motivational aspects have been linked to the prevalence of cyberloafing (Deci & Ryan, 2012). Intrinsic motivation, derived from genuine interest and enjoyment in work, and extrinsic motivation, fuelled by external rewards or pressures, can influence an employee's performance and propensity to engage in cyberloafing. Understanding these motivational dynamics can thus provide valuable insights into mitigating this counterproductive behavior.

To sum up, the extant literature highlights the multifaceted nature of cyberloafing behavior, underscoring the interplay of demographic characteristics, job-related factors, and motivational aspects. By focusing on these factors, this study seeks to extend the current body of knowledge on cyberloafing among remote workers, emphasizing the unique context of the COVID-19 pandemic and the work-from-home situation it necessitated.

## 2.1. Cyberloafing

In the wake of technological advancement and a shift towards digital workspaces, cyberloafing has become a significant concern for organizations. This phenomenon has been further exacerbated by the current global situation, where the COVID-19 pandemic has made the Internet and digital devices ubiquitously accessible to employees working from home, providing ample opportunities for cyberloafing.

According to Robinson & Bennett (1995), cyberloafing, or the misuse of the Internet at the workplace, can result in serious productivity issues. Employees may engage in various Internet-related activities, broadly classified by Li & Chung (2006) as social, informational, leisure, and virtual emotional activities. As the Internet becomes increasingly integrated into our daily lives, the temptation to use it for personal, non-work-related needs during work hours intensifies, leading to cyberloafing being a prevalent method of time wastage at work.

Cyberloafing behavior is closely associated with employees' perceptions of administrative rules and organizational norms, and these perceptions can significantly influence the prevalence of cyberloafing (Henle & Blanchard, 2008). Furthermore, it has been associated with self-control depletion, suggesting that employees may resort to cyberloafing when their self-regulatory resources decline to a critical level (Vohs & Baumeister, 2011).

While some instances of cyberloafing may appear benign, it is essential to acknowledge the potential severity of this behaviour. Extreme cases of cyberloafing, such as engaging in illegal activities like gambling, unauthorized downloads, or viewing explicit content, may expose organizations to legal liabilities and significant reputational harm (Case & Young, 2002).

In summary, cyberloafing is a multifaceted and potentially damaging behavior amplified by the proliferation of digital technology and the rise of remote work conditions. It warrants comprehensive investigation and understanding to devise effective preventative measures.

## 2.2. Job Overload and its impact on Cyberloafing

Job overload is a prevalent concern in contemporary work environments and is characterized by the perception that the work demands exceed the employee's capacity to meet them. An overburdened workload can lead to various detrimental effects, among which is the propensity for employees to engage in cyberloafing. Employees facing high job demands often experience emotional exhaustion, triggering counterproductive work behaviors such as cyberloafing (Bolton, et al., 2012). Using the Internet and digital devices for non-work purposes can be an emotional regulation strategy, providing a sense of control and satisfaction amid overwhelming work pressures.

The link between job overload and cyberloafing is also supported by De Clercq & Belausteguigoitia's (2018) assertion that employees who perceive their tasks as unachievable are more likely to engage in cyberloafing. The accompanying feelings of job burnout and stress may drive employees to seek refuge in online distractions, resulting in increased cyberloafing.

However, Andreassen, et al. (2014) argue that the relationship between job overload and cyberloafing can vary based on individual perspectives toward work tasks. In some instances, overload might spur employees towards greater efficiency and reduced cyberloafing, while in others, it could exacerbate such counterproductive behavior.

Moreover, high job demands often induce stress, leading to withdrawal behaviors and increased dependency on digital devices for distraction (Carpenter & Berry, 2015). This could potentially harm the organization, resulting in negligence towards work and related tasks. The burden of heavy work can also lead to detachment from work and animosity towards the organization, further driving individuals towards cyberloafing (Bolton, et al., 2012).

In summary, while the relationship between job overload and cyberloafing appears complex and multifaceted, a consensus suggests a strong link. Cyberloafing seems to be a standard outlet for employee stress as job pressures escalate. However, the nuanced nature of this relationship necessitates further exploration to clarify the mechanisms at play (Henzel & Kacprzak, 2020).

### 2.3. Motivation and its effect on Cyberloafing

Intrinsic and extrinsic motivation plays a crucial role in dictating an employee's level of engagement and performance in the workplace (Ryan, 2012). Intrinsic motivation stems from the individual's inherent interest and enjoyment in work itself, and extrinsic motivation, driven by tangible rewards or outcomes, can significantly influence an employee's behavior, including their likelihood to engage in cyberloafing.

When employees perceive unfair treatment or exploitation in the workplace, it often leads to dissatisfaction and frustration, manifesting as counterproductive work behaviours such as cyberloafing (Ambrose, et al., 2002). When motivation levels decrease, the likelihood of engagement in activities unrelated to work, such as internet browsing for personal interests, may increase.

Moreover, personality traits and situational factors can significantly impact an employee's satisfaction and, by extension, their likelihood to engage in cyberloafing. Certain personality traits like conscientiousness and self-control have been linked to a lower propensity for cyberloafing. Simultaneously, situational factors such as job demands, workload, and perceived fairness can also influence the prevalence of such behaviours. When employees struggle to manage these variables, they may be more inclined to seek distraction and relief through cyberloafing (Lim, 2002; Andreassen, Ursin, & Eriksen, 2007).

The relationship between motivation and cyberloafing underscores the psychological complexities underpinning workplace behaviors. Recognizing the potential implications of diminished motivation and how it may drive employees towards cyberloafing can inform effective strategies to reduce this counterproductive behavior.

### 2.4. Demographic factors influence Cyberloafing

Demographic factors such as age and gender can significantly influence the occurrence of cyberloafing in the workplace. Understanding how these variables impact employees' internet usage behavior can inform the development of more targeted and effective cyberloafing prevention strategies. The relationship between age and cyberloafing has been explored extensively, albeit with mixed findings. Some studies suggest that younger employees are more inclined to engage in cyberloafing, largely due to their familiarity and comfort with the Internet and digital technology (Jia, et al., 2013). Conversely, other studies argue that older employees engage in more cyberloafing, possibly due to lessened supervision or reduced motivation (Restubog et al., 2011). Meanwhile, some research has indicated no significant correlation between age and cyberloafing at all (Ozler & Polat, 2012), underscoring the complexity of this relationship and the need for further investigation.

In terms of gender, several studies indicate that male employees are more prone to engage in counterproductive internet use than their female counterparts, suggesting a higher risk propensity associated with internet misuse among men (Lim & Chen, 2012). Conversely, women are reportedly less likely to participate in cyberloafing behaviours, possibly due to their lesser confidence in navigating the Internet or a more negative perception of its misuse (Broos, 2005).

In summary, demographic factors play a role in influencing cyberloafing behaviors, although the specific dynamics and the extent of their effects can vary. Further research is needed to elucidate these relationships, enabling organizations to address cyberloafing more effectively based on the unique characteristics of their workforce.

### 3. Research Question and objectives

The researcher tries to answer the question “Will demographic and organizational factors affect the Cyberloafing behaviour at work from home situation?” and the following objectives are established within the study. The main objectives were to identify the effect of job overload on Cyberloafing, understand how intrinsic motivation affects Cyberloafing behaviors, observe the influence of extrinsic motivation on Cyberloafing behaviors and to analyze the effects of age and gender on Cyberloafing behaviors.

The following hypotheses formulated as H1: Job overload is positively related to Cyberloafing. H2a: Intrinsic motivation is negatively related to Cyberloafing. H2b: Extrinsic motivation is negatively related to Cyberloafing.

Variables in research are the attributes attached to the situation that is being studied. Dependent variables: It refers to the variable that changes with or is impacted by the independent variables. Independent variables: These are the variables that are manipulated or changed due to the situation involved. Control variables: These are the variables kept constant throughout the study to better understand the relation between the factors involved. Cyberloafing being dependant variable and Job overload, Intrinsic motivation and Extrinsic motivation were considered as independent variables for the study. Gender, Age, Personal internet use and Work from home were kept as control variable to minimize the effect.

The following operational definition are used in the study.

**3.1. Cyberloafing** refers to the focus deviation from work due to the influence of gadgets and the internet for personal need fulfillment. It may result in a loss of productivity, resources, and time. It involves the personal use of the internet and gadgets for socializing, entertainment, etc. It is the lowest impact of cyber deviant behavior.

**3.2. Job Overload** refers to the situation where the employee feels overpressurized by the tasks allotted to do during a short period and quickly. This variable can influence Cyberloafing as it increases the chances of neglecting work.

**3.3. Intrinsic motivation** refers to the kind of motivation that is not due to monetary rewards but due to the excitement, opportunities, satisfaction, etc., involved in the work done. It affects the intensity of Cyberloafing to a great extent.

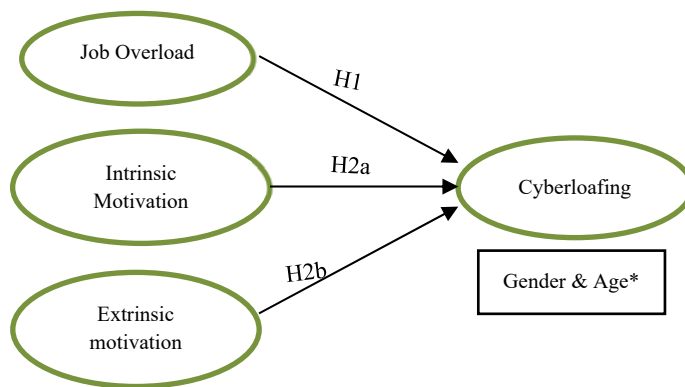
**3.4. Extrinsic motivation** refers to the motivation received from external sources like monetary rewards, recognition, etc. It induces a greater need to complete the tasks assigned among the employees. These factors induce more motivation and can impact Cyberloafing behavior positively.

**3.5. Gender:** The gender of the employee may affect the Cyberloafing behavior depending on their social or entertainment needs. This may hinder the major study; thus, it is controlled throughout the research.

**3.6. Age:** This may be divided for the convenience of our study as Generation Z and Y depending on their technology familiarity. The control variable study are mainly two. Personal Internet Use and Work from home. Personal Internet Use is considered as the employees studied upon are working from home and do not have access to their company's internet. It affects the major study. Thus, it is controlled.

Work from home condition is controlled due to the sample requirement and the COVID-19 conditions prevailing during the study period that hinder employees from working from the office.

**Figure 1.** *Research Model*



#### 4. Methodology

The present study employs a descriptive research design, combining observations and surveys to gather data. This approach enables the collection of rich, detailed data concerning the prevalence and factors influencing cyberloafing among employees working from home. The population under study includes employees working remotely in the IT sector in Kerala, India, during the COVID-19 pandemic. A sample size of 317 IT employees was chosen using a convenience sampling technique, providing a broad cross-section of perspectives on cyberloafing. Convenience sampling, while potentially limiting in terms of representativeness, offers practicality and efficiency in reaching many participants in the current work-from-home context.

Data was primarily collected through a structured questionnaire featuring a 5-point Likert scale. This quantitative method allows for the precise measurement of participants' attitudes and behaviours related to cyberloafing, as well as the influencing factors identified in the literature, namely job overload, motivation, and demographic variables. Secondary data was sourced from scholarly articles and e-books available on the Internet, providing supplementary insights and context to the primary data collected. The data collected were then analyzed using Structural Equation Modelling (SEM) using the Smart PLS 3 software.

SEM allows for the investigation of complex relationships between observed and latent variables, offering a robust and flexible approach to understanding the multifaceted nature of cyberloafing behaviour. The chosen methodology is designed to provide a comprehensive and nuanced understanding of cyberloafing among IT employees in Kerala, which can then inform targeted interventions and strategies to mitigate this counterproductive behaviour.

#### 4.1. Scales for Measuring Variables

**Table 1.** *Scales for Measuring Variables*

| Variables                         | Source of scale                                            | Sample Item                                     |
|-----------------------------------|------------------------------------------------------------|-------------------------------------------------|
| Cyberloafing<br>(22 items scale)  | Lim 2002, Henle, Christine A., and Anita L. Blanchard 2008 | Received non-work-related email                 |
| Job Overload<br>(3 items)         | Management Standards Indicator Tool (MSIT)                 | I have to work very hard.                       |
| Intrinsic motivation<br>(4 items) | Multidimensional Work Motivation Scale                     | My work gives me opportunities for development. |
| Extrinsic motivation<br>(3 items) | Multidimensional Work Motivation Scale                     | I feel financially motivated to do a good job.  |

### 5. Analysis and Results

The study targets employees within various Information Technology roles across different organizations in Kerala, India. The data were collected through an online survey method, distributing a structured questionnaire employing a 5-point Likert scale to IT employees. The questionnaire encompassed 32 items covering different aspects related to cyberloafing and the key factors thought to influence it. Specifically, it contained 22 items dedicated to capturing different manifestations of cyberloafing behavior, 3 items associated with the level of job overload experienced by the respondents, 4 items pertaining to intrinsic motivation, and 3 items related to extrinsic motivation. All these items were adapted from standard scales and seminal literature in the field to ensure the validity and reliability of the measures used. In total, 317 responses were received, providing a robust data set for subsequent analysis. In terms of gender distribution among the respondents, there was an almost equal split, with 157 males and 160 females participating in the survey. This balanced gender distribution allows for meaningful comparisons and an understanding of the gender-specific tendencies towards cyberloafing. With regard to the age distribution, the respondents comprised of both Generation Y (53%) and Generation Z (47%) employees. This age-based categorization provides insights into the generational differences in cyberloafing behavior and the influence of age-related factors, such as technical knowledge, socializing needs, and entertainment preferences.

The demographic composition of the sample is critical in understanding the differential influences of gender and age on cyberloafing behavior. A diverse set of responses, representing varied demographic backgrounds, helps identify whether certain demographic groups are more predisposed to cyberloafing behavior, and under what conditions this behavior may be amplified or mitigated. The subsequent analysis focuses on examining these relationships and exploring the interplay between job overload, motivation (both intrinsic and extrinsic), and demographic factors in shaping cyberloafing behavior among IT employees in Kerala.



### 5.1. Reliability and validity

The reliability and validity of the data collected from the respondents were done through the Smart PLS 3 software and are essential in delivering a proper conclusion to the study. The results are as follows.

**Table 2.** *Reliability analysis*

|                      | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|----------------------|------------------|-------|-----------------------|----------------------------------|
| Cyberloafing         | 0.874            | 0.86  | 0.881                 | 0.259                            |
| Extrinsic Motivation | 0.643            | 0.746 | 0.803                 | 0.582                            |
| Intrinsic Motivation | 0.769            | 0.8   | 0.847                 | 0.581                            |
| Job Overload         | 0.793            | 0.818 | 0.877                 | 0.703                            |

The above figure shows the extent to which the test is relevant to measure the variables. The threshold values for Cronbach's Alpha, Rho\_A, Composite reliability, and Average Variance Extracted (AVE) are 0.60, 0.70, 0.60 and 0.50. (Urbach & Ahlemann, 2010)

Cronbach's Alpha is used to understand the internal uniformity of the measure taken. Rho\_A calculates the reliability index for individual factors. Composite reliability is also a reliability pointer but also reflects the changing factors of the constructs. Average Variance Extracted shows the validity measurement of the amount of Variance found after affected by the errors in measurement. The Cyberloafing variable showed a slight fall below the threshold. All these thresholds were satisfied, as seen in Table 3.

**Table 3.** *Discriminant validity (Fornell-Larcker criterion)*

|                      | Cyberloafing | Extrinsic Motivation | Intrinsic Motivation | Job Overload |
|----------------------|--------------|----------------------|----------------------|--------------|
| Cyberloafing         | 0.509        |                      |                      |              |
| Extrinsic Motivation | 0.11         | 0.763                |                      |              |
| Intrinsic Motivation | 0.2          | 0.376                | 0.762                |              |
| Job Overload         | 0.175        | 0.198                | 0.101                | 0.839        |

**Table 4.** *Discriminant validity (Hetero trait-Mono trait Ratio)*

|                      | Cyberloafing | Extrinsic Motivation | Intrinsic Motivation | Job Overload |
|----------------------|--------------|----------------------|----------------------|--------------|
| Cyberloafing         |              |                      |                      |              |
| Extrinsic Motivation | 0.173        |                      |                      |              |
| Intrinsic Motivation | 0.212        | 0.564                |                      |              |
| Job Overload         | 0.192        | 0.262                | 0.14                 |              |

Tables 3 and 4 show the discriminant validity using Fornell -Larcker criterion and Hetero trait -Mono trait Ratio (HTMT). They check whether unrelated variables are associated or not, i.e., should not overlay. This is the variable that governs whether the variables are correlated or not.

The discriminant validity, according to Fornell -Larcker criterion, the top most value (AVE Square root) in any factor column is higher than the values (Correlations) below it, then there is discriminant validity. Thus, it can be observed that discriminant validity is present. (Fornell & Larcker, 1981)

The discriminant validity value as per the HTMT ratio is preferred to be less than 0.85 to be acceptable. From Table 4, all the values are below 0.85; thus, discriminant validity has been recognized among two reflective constructs. (Henseler, Ringle, & Sarstedt, 2015).

**Table 5.** *Collinearity Statistics (VIF)*

|                      | Cyberloafing |
|----------------------|--------------|
| Cyberloafing         |              |
| Extrinsic Motivation | 1.201        |
| Intrinsic Motivation | 1.166        |
| Job Overload         | 1.042        |

The quality of the measurement model was examined using the Variance inflation factor (VIF) and was required to have a value below 5. As seen in Table 5 the values are slightly above 1 in the case of both inner and outer collinearity, thus satisfying the threshold value. (Kock & Lynn, 2012).

## 5.2. Descriptive statistics

Table 6 shows the mean, median, minimum, maximum, and standard deviation values of the variables which are analyzed in the study. All the items belonging to the variables have been measured using a 5-point Likert scale where 1= Strongly Disagree and 5= Strongly Agree. These are reflected in the minimum and maximum values. Considering the mean values, it is evident that Cyberloafing (61.987) is of maximum importance to the study and respondents. The independent variables belonged to the medium level range.

The median values show the data set in the center of the dataset. When compared to the mean, it gives the distribution of the data set. From Table 6 the distribution can be seen as more or less even to the mean values.

**Table 6.** *Descriptive Statistics*

| Variables            | Mean      | Median | Minimum | Maximum | Standard Deviation |
|----------------------|-----------|--------|---------|---------|--------------------|
| Cyberloafing         | 61.987382 | 60     | 22      | 110     | 27.4467409         |
| Job Overload         | 10.936908 | 12     | 3       | 15      | 2.83673363         |
| Intrinsic Motivation | 14.293375 | 16     | 4       | 20      | 3.37387323         |
| Extrinsic Motivation | 10.675079 | 11     | 3       | 15      | 2.77450164         |

The values under standard deviation show the average detachment between the mean and the values attained from the data. All the independent variables show low standard deviation as compared to the dependent variable.

**Table 7.** *Descriptive Statistics of Cyberloafing*

|                                       | Mean     | Standard Deviation |
|---------------------------------------|----------|--------------------|
| Received non-work-related email       | 3.899054 | 1.172968           |
| Sent non-work-related email           | 2.340694 | 1.228879           |
| Checked non-work-related email        | 3.066246 | 1.289697           |
| Visited general news sites            | 3.356467 | 1.188978           |
| Visited banking/ financial websites   | 2.955836 | 1.272123           |
| Visited stock or investment websites  | 2.365931 | 1.318745           |
| Visited newsgroups or bulletin boards | 2.873817 | 1.274075           |
| Visited job hunting/employment sites  | 3.22082  | 1.305469           |
| Shopped online for personal goods     | 3.665615 | 1.230616           |
| Viewed sports-related websites        | 2.946372 | 1.46271            |
| Visited online auctions sites         | 2.217666 | 1.314454           |
| Booked vacations/travel               | 2.722397 | 1.418203           |
| Chat Rooms                            | 2.955836 | 1.279564           |
| Personal web page                     | 2.343849 | 1.160424           |
| Virtual communities                   | 2.750789 | 1.202992           |

|                   | Mean     | Standard Deviation |
|-------------------|----------|--------------------|
| Instant messaging | 3.596215 | 1.169652           |
| Online personals  | 3.003155 | 1.156978           |
| Blog Reads        | 2.712934 | 1.173113           |
| Music Downloads   | 3.148265 | 1.29999            |
| Online gaming     | 2.479495 | 1.408739           |
| Online Gambling   | 1.507886 | 0.992424           |
| Adult web sites   | 1.858044 | 1.125948           |

From table 7 it can be seen that the employees received non- work-related mails (3.899), shopped online goods for personal needs (3.666), and were involved in instant messaging (3.596) as they show a greater mean value and low standard deviation indicating homogeneity.

**Table 8.** *Descriptive Statistics of Job Overload*

|                 | Mean     | Standard Deviation |
|-----------------|----------|--------------------|
| Work very hard  | 3.757098 | 0.945168           |
| Work long hours | 3.574132 | 1.024244           |
| Work very fast  | 3.605678 | 0.867321           |

From table 8 it can be seen that the employees have to work hard for long hours on a fast-pace as they showed a mean value above 3.6 and low standard deviation indicating homogeneity in results.

**Table 9.** *Descriptive Statistics of Intrinsic motivation*

|                                | Mean     | Standard Deviation |
|--------------------------------|----------|--------------------|
| Opportunities for development. | 3.766562 | 0.816611           |
| Interesting work               | 3.564669 | 0.803324           |
| Source of satisfaction         | 3.485804 | 0.859029           |
| Happiness at work              | 3.476341 | 0.894909           |

From table 9, it can be seen that the employees found greater opportunities for development at work and worked in interesting tasks as they show a greater mean value above 3.5 and a standard deviation below 0.9, indicating homogeneity in responses.

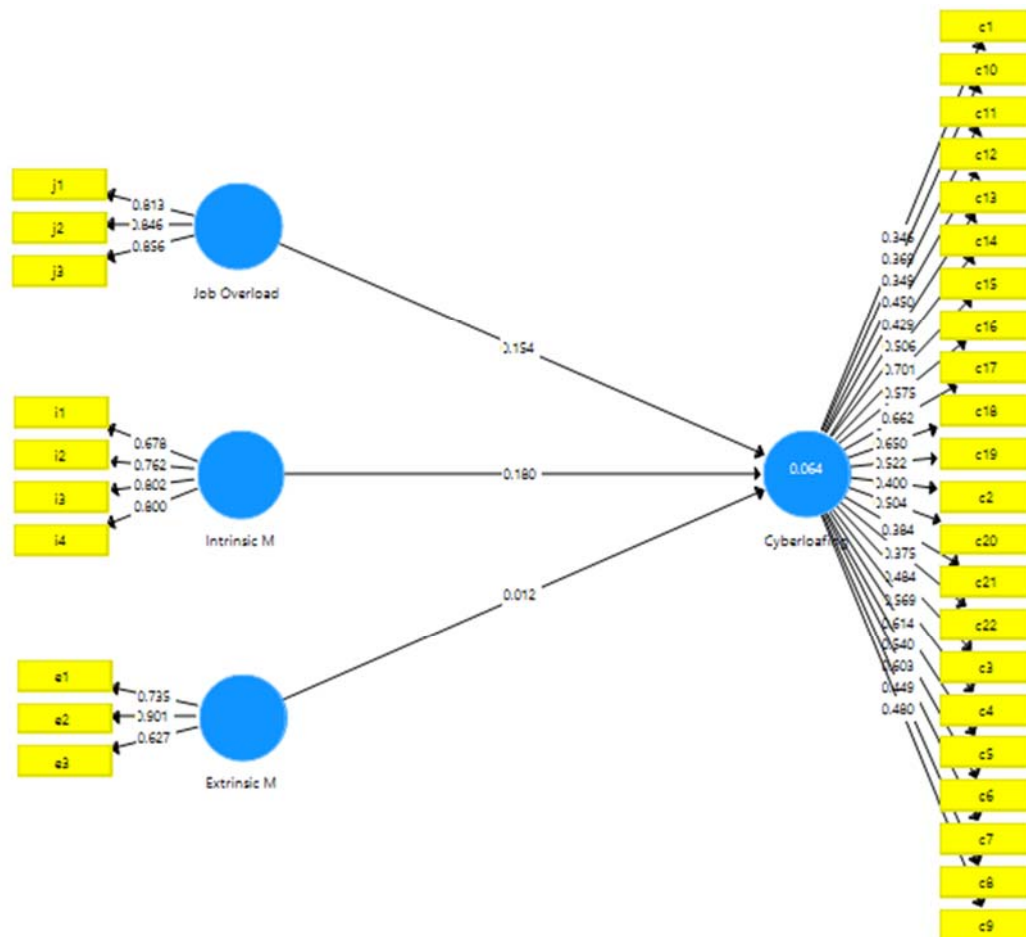
**Table 10.** *Descriptive Statistics of Extrinsic motivation*

|                          | Mean     | Standard Deviation |
|--------------------------|----------|--------------------|
| Financially motivated    | 3.823344 | 0.864393           |
| Salary motivates to work | 3.504732 | 0.986046           |
| Fairly waged             | 3.347003 | 0.924062           |

From table 10 it can be seen that the employees were financially motivated at work as they showed a mean value of 3.823 and low standard deviation indicating consistency in the results obtained.

### 5.3. Inferential statistics

The path model shows that Intrinsic motivation (0.180) and Job overload (0.154) and has a major impact followed by Extrinsic motivation (0.012) with the least impact on Cyberloafing. The items relating to each variable also had a balanced yet high impact. In a path coefficient, the negative figures show the negative relationship between variables or the presence of a strong negative indicator while the positive figures indicate strong positive relationship between variables.

**Figure 2. Path Model****Table 11. Path Coefficients**

|                                      | Original Sample (O) or standardized Beta coefficient | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics | P Values | Testing results |
|--------------------------------------|------------------------------------------------------|-----------------|----------------------------|--------------|----------|-----------------|
| Extrinsic Motivation -> Cyberloafing | 0.012                                                | 0.031           | 0.112                      | 0.105        | 0.916    | Rejected        |
| Intrinsic Motivation -> Cyberloafing | 0.180                                                | 0.180           | 0.136                      | 1.318        | 0.188    | Rejected        |
| Job Overload -> Cyberloafing         | 0.154                                                | 0.172           | 0.075                      | 2.046        | 0.041    | Accepted        |

A bootstrapping technique for 1000 samples was implemented to test the model, and the significance of path coefficients was assessed. From the table 12, P values for H1 is accepted (0.041) as it is significant and below the threshold value of 0.05. We can see that Job overload ( $\beta = 0.154$ ) can be seen as having a positive relationship with Cyberloafing, i.e., there is an increased chance of employees to cyber deviate when under job pressure. At the same time, H2a and H2b are rejected due to variation in P values from the threshold

value, i.e., greater than 0.05 between Intrinsic (0.188) and extrinsic (0.916) motivation with the Cyberloafing behavior.

#### 5.4. Regression Analysis and Hypothesis Testing

To understand the predictive relation of the variables, a regression analysis was done. The relation between independent (Job overload, extrinsic and intrinsic motivation) and dependent (Cyberloafing) variables was tested for regression and gave the following output as given in tables 13 and 14. (Neil, 2016).

**Table 12.** *Regression statistics (IV-DV)*

| Multiple R | R Square    | Adjusted R Square |
|------------|-------------|-------------------|
| 0.166674   | 0.027780245 | 0.018461845       |

This table shows that the Multiple R or correlation coefficient shows (0.167) show weaker relationships between the independent and dependent variables. We can also understand that R square or the coefficient of determination (0.028) shows that the values are scattered and do not fit the regression line.

**Table 13.** *Significance and regression values (IV-DV)*

|           | Coefficients | Standard Error | t Stat    | P-value     | Lower 95% | Upper 95% |
|-----------|--------------|----------------|-----------|-------------|-----------|-----------|
| Intercept | 2.11143      | 0.26888        | 7.85274   | 6.55135E-14 | 1.58239   | 2.64047   |
| JO        | 0.11254      | 0.04655        | 2.41782   | 0.01618     | 0.02096   | 0.20412   |
| IM        | 0.08651      | 0.06119        | 1.41376   | 0.15842     | (0.03389) | 0.20691   |
| EM        | (0.00372)    | 0.05662        | (0.06572) | 0.94764     | (0.11512) | 0.10768   |

The above table finds the relation between job overload (0.0162) and Cyberloafing as significant since the P-value is less than 0.05 and confirms the Hypothesis as accepted with the relation being positive. In contrast, the factors relating to motivation are found to be irrelevant to the study.

**Table 14.** *Regression statistics (CV-DV)*

| Multiple R | R Square    | Adjusted R Square |
|------------|-------------|-------------------|
| 0.128424   | 0.016492618 | 0.01022824        |

From table 14 we see that the correlation coefficient (0.128) illustrates a feeble relation amongst the control (Age and Gender) and dependent (Cyberloafing) variables. We can also comprehend that the coefficient of determination (0.016) shows that the values are highly dispersed and do not fit the regression line.

**Table 15.** *Significance and regression values (CV-DV)*

|           | Coefficients | Standard Error | t Stat   | P-value | Lower 95% | Upper 95% |
|-----------|--------------|----------------|----------|---------|-----------|-----------|
| Intercept | 2.41765      | 0.17810        | 13.57460 | 0.00000 | 2.06723   | 2.76807   |
| Age       | 0.13552      | 0.07518        | 1.80274  | 0.07239 | (0.01239) | 0.28344   |
| Gender    | 0.13425      | 0.07504        | 1.78889  | 0.07460 | (0.01341) | 0.28190   |

In the above table, we find the relation between Age, Gender, with Cyberloafing as slightly significant since the P-value is somewhat greater than 0.05. This shows a possible relation between the generation difference saying Y and Z exists and can be further established.

## 6. Discussion

This study extends the literature on cyberloafing, examining the organizational and demographic factors that may influence this behavior in the context of remote work. From the findings derived in our analysis, it is clear that job overload bears a positive correlation with cyberloafing, implying that excessive work demands can lead employees to misuse internet resources and devices for non-work-related activities. Contrary to what one might expect, intrinsic and extrinsic motivations appeared to have no significant influence on cyberloafing behavior. This suggests that regardless of the type of motivation provided to employees, it doesn't seem to impact their propensity to engage in cyberloafing. This warrants further investigation into how organizations might effectively deter such behaviors.

The analysis also investigated gender and generational factors as potential control variables and found some minor significance. This indicates that while the effect might be marginal, these demographic variables could indeed subtly shape employees' attitudes towards cyberloafing. These conclusions are based on a dataset comprising 317 responses gathered from IT professionals across Kerala who are currently in a work-from-home setting. This research thus provides new insights into cyberloafing behaviors in the digital age, particularly as remote work becomes increasingly common. Future research should continue exploring additional factors that may influence such behaviors, in order to guide the development of more effective strategies for managing and reducing cyberloafing.

## 7. Theoretical Implications

The findings from this study have important theoretical implications for understanding cyberloafing within the context of remote work, particularly in the IT industry. Firstly, the positive correlation between job overload and cyberloafing challenges the traditional work engagement models, suggesting that beyond a certain threshold, increasing job demands can lead to counterproductive work behaviors. This highlights the need for updated models that integrate the digital dimensions of work, and address the dichotomy between increased productivity and counterproductive internet use.

Secondly, the non-significance of intrinsic and extrinsic motivation on cyberloafing behavior contrasts with many theories of motivation, which suggest that these factors should directly influence employees' behavior. This implies that traditional motivational theories might not fully apply in the context of cyberloafing. Therefore, new theoretical frameworks may be needed to comprehend how motivation interacts with digital distraction.

The slight significance of demographic factors such as gender and generational differences also suggests that theories of cyberloafing need to consider these variables. It indicates that demographic elements might play a more nuanced role in shaping cyberloafing behaviors, adding another layer of complexity to the theoretical understanding of this phenomenon.

This study thus illuminates the potential for a more nuanced theoretical framework to understand cyberloafing, considering factors like job overload, motivation, and demographic characteristics. Such a framework would better reflect the realities of remote work, which is becoming the norm in many industries. Future theoretical explorations should continue to delve into these dimensions, thereby broadening and deepening our understanding of cyberloafing in the digital age.

## 8. Managerial Implications

The findings of this study provide important managerial insights regarding cyberloafing in the context of remote work environments, particularly within the IT sector.

*Workload Management:* The significant correlation between job overload and cyberloafing indicates that managers need to assess workload levels among their staff carefully. Implementing strategies to avoid overloading employees could be key to reducing cyberloafing. This might include balancing task allocation, ensuring adequate resources and manpower, and providing ample breaks for mental rejuvenation.

*Adapting Motivational Strategies:* Given that intrinsic and extrinsic motivation did not significantly impact cyberloafing behavior, managers may need to explore new methods to encourage productive work habits in a remote context. Traditional motivation techniques may not suffice in curbing cyberloafing; alternative strategies may include fostering a healthy work culture, providing supportive and understanding leadership, or implementing flexibility in work hours.

*Enhanced Monitoring Systems:* The adoption of robust and ethical monitoring systems can help in managing cyberloafing. While respecting employee privacy, these systems can help ensure that work hours are not used for personal internet browsing. Actions might include blocking certain websites during work hours or monitoring computer usage without infringing on personal privacy rights.

*Consideration of Demographic Factors:* Although demographic factors like gender and generational differences showed only slight significance, managers should still consider these factors when creating policies to manage cyberloafing. Understanding the unique behaviors and motivations of different demographic groups can help in creating more targeted and effective strategies.

*Building Awareness and Encouraging Responsibility:* Organizations can work towards creating a greater awareness among employees about the negative impact of cyberloafing on their performance and productivity. Encouraging a sense of responsibility for maintaining productive work behaviors could potentially curb cyberloafing tendencies.

*Balancing Work-Life Integration:* As remote work blurs the boundaries between professional and personal life, managers need to acknowledge this reality and make

accommodations where necessary. Allowing for certain degrees of flexibility can enable employees to meet personal needs without resorting to cyberloafing.

By addressing these implications, organizations can create a more productive and efficient remote work environment, mitigating the prevalence and impact of cyberloafing.

## 9. Conclusion

The present study offers insightful conclusions regarding the relationship between job overload, motivation, demographic variables, and cyberloafing, particularly in the context of remote work scenarios among IT employees in Kerala. One key finding is the significant correlation between job overload and cyberloafing, reinforcing previous research that job pressure can spur employees towards counterproductive internet use. This suggests that workload management should be a focal point for organizations aiming to curb cyberloafing, particularly in remote work arrangements.

Intriguingly, neither intrinsic nor extrinsic motivation appeared to exert a significant influence on cyberloafing behaviour. This prompts the need for further investigation into the complex dynamics of motivation and internet misuse, especially as workplaces continue to evolve in response to external forces such as the ongoing trend towards remote work.

The role of demographic variables, namely age and gender, in cyberloafing also emerged as a compelling area for further exploration. Despite a minimal statistical significance found in this study, these variables might hold critical insights into more nuanced, individualized strategies for managing cyberloafing. The differences between Generation Y and Z, for example, could dictate unique approaches for each group, taking into account their digital familiarity, socialization needs, or other behavioural traits.

In conclusion, this study underscores the importance of organizational factors, primarily job overload, in influencing cyberloafing behaviours, whereas motivational factors may not play a significant role. Demographic factors, though mildly significant, hint at the need for more personalized, demographic-specific cyberloafing management strategies.

As remote work becomes increasingly prevalent and as the digital natives of Generations Y and Z continue to enter the workforce, research like this becomes even more critical. This study can serve as a valuable foundation for further exploration into cyberloafing and its various influencing factors, particularly in the era of remote work. It is our hope that such findings will contribute to more effective strategies for minimizing counterproductive behaviours, thus fostering a healthier and more productive digital work environment.



---

## References

---

- Ambrose, M., Seabright, M. and Schminke, M., 2002. Sabotage in the workplace: The role of organizational injustice. *Organizational Behavior and Human Decision Processes*, pp. 947-965.
- Andreassen, C.S., Torsheim, T. and Pallesen, S., 2014. Predictors of Use of Social Network Sites at Work - A Specific Type of Cyberloafing. *Journal of Computer-Mediated Communication*.
- Bolton, L.R., Harvey, R.D., Grawitch, M.J. and Barber, L.K., 2012. Counterproductive Work Behaviours in Response to Emotional Exhaustion: A Moderated Mediation Approach. *Stress Health*, pp. 222-223.
- Broos, A., 2005. Gender and Information and Communication Technologies (ICT) Anxiety: Male Self-Assurance and Female Hesitation. *Cyberpsychology & Behavior*, pp. 21-31.
- Carpenter, N.C. and Berry, C.M., 2015. Are Counterproductive Work Behavior, *Journal of Management*.
- Case, C.J. and Young, K.S. (2002). Employee Internet Management: Current Business Practices and Outcomes. *Cyberpsychology & Behavior*.
- Cooper, D.R., Schindler, P.S., and Sharma, J. K. (2012). *Business Research Methods*. New Delhi: McGraw Hill Education (India) Private Limited.
- De Clercq, D. and Belausteguigoitia, I., 2018. Reducing the harmful effect of work overload on creative behaviour: Buffering roles of energy-enhancing resources. *Creativity and Innovation Management*.
- Deci, E.L. and Ryan, R.M., 2012. Motivation, Personality, and Development within Embedded Social Contexts: An Overview of Self-Determination Theory. In *The Oxford Handbook of Human Motivation* (pp. 1-26). Oxford University Press.
- Fornell, C. and Larcker, D.F., 1981. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*.
- Henle, C.A. and Blanchard, A.L., 2008. The Interaction of Work Stressors and Organizational Sanctions on Cyberloafing. *Journal of Managerial Issues*.
- Henseler, J., Ringle, C.M. and Sarstedt, M., 2015. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science* volume, pp. 115-135.
- Henzel, P.G. and Kacprzak, A., 2020. Job Overload, Organizational Commitment, and Motivation as Antecedents of Cyberloafing: Evidence from Employee Monitoring Software. *European Management Review*, pp. 9-10.
- Jia, H., Jia, R. and Karau, S., 2013. Cyberloafing and Personality: The Impact of the Big Five Traits and Workplace Situational Factors. *Journal of Leadership & Organizational Studies*, pp. 358-365.
- Kock, N. and Lynn, G.S., 2012. Lateral Collinearity and Misleading Results in. *Journal of the Association for Information Systems*, pp. 546-580.
- Li, S.M. and Chung, T.M., 2006. Internet function and Internet addictive behavior. *Computers in Human Behavior*, pp. 1067-1071.
- LIM, V.K., 2002. The IT way of loafing on the job. *Journal of Organizational Behavior*, pp. 677-678.
- Lim, V.K. and Chen, D., 2012. Cyberloafing at the workplace: gain or drain on work? *Behaviour & Information Technology*, pp. 343-353.
- Neil, S., 2016. *Excel Statistics: A Quick Guide*. SAGE publications.

- Ozler, D.E. and Polat, G., 2012. Cyberloafing phenomenon in organizations: determinants and impacts. *International journal of e-business and e-government studies*.
- Restubog, S.L., Garcia, P.R., Toledano, L.S., Amamani, R.K., Tolentino, L.R. and Tang, R.L., 2011. Yielding to (cyber)-temptation: Exploring the buffering role of self-control in the relationship between organizational justice and cyberloafing behavior in the workplace. *Journal of Research in Personality*, pp. 247-251.
- Robinson, S.L. and Bennett, R.J., 1995. A Typology of Deviant Workplace Behaviors: A Multidimensional Scaling Study. *The Academy of Management Journal*, pp. 556-557.
- Ryan, R.M., 2012. Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. *The Oxford handbook of human motivation*.
- Urbach, N. and Ahlemann, F., 2010. Structural Equation Modeling in Information Systems. *Journal of Information Technology Theory and Application*.
- Weatherbee, T.G., 2010. Counterproductive use of technology at work: Information & communications technologies and cyberdeviancy. *Human Resource Management Review*, 36.
- Zhang, Y., 2005. Age, gender, and Internet attitudes. *Computers in Human Behaviour*, pp. 8-9.