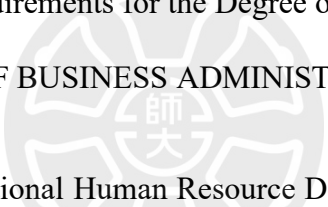


**Understanding Cyberloafing: A Systematic Review of Pre- and Post-  
COVID-19 Trends, Organizational Responses, and Ethical Concerns**

by  
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## ABSTRACT

This study explores the evolution of cyberloafing in the workplace, particularly in the context of the COVID-19 pandemic and its aftermath. Through a systematic literature review (SLR) of 267 articles published between 2020 and 2024, the research synthesizes how cyberloafing behaviors have changed across pre-pandemic, pandemic, and post-pandemic settings, how organizations have responded, and what ethical concerns have emerged in managing such behaviors through electronic performance monitoring (EPM). Findings reveal that cyberloafing has transitioned from being viewed solely as deviant behavior to a more complex coping mechanism shaped by stress, autonomy, and contemporary work environments. Organizational responses ranged from monitoring and policy enforcement to employee engagement strategies and work redesign. Ethical concerns on privacy, trust, and fairness were noted but underexplored empirically. This study contributes to the growing understanding of cyberloafing as a context-dependent behavior. It highlights the need for balanced strategies that protect productivity while supporting employee well-being. Future research should prioritize longitudinal designs, ethical evaluations of EPM, and broader sampling to capture diverse workplace experiences.

*Keywords:* cyberloafing, cyberslacking, COVID-19, monitoring, organizational responses



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# CHAPTER I INTRODUCTION

This chapter provides an overview of the research. It presents the background of the study, explains the rationale for conducting the research, outlines the study's objectives, states the research questions, defines the scope of the study, and provides definitions of key terms.

## Research Background

The rapid advancement of technology and the increasing ubiquity of the internet have significantly transformed workplaces worldwide. As of October 2024, around 5.52 billion people—equivalent to 67.5% of the global population—had internet access, with approximately 5.22 billion (63.8%) actively engaging with social media platforms (Statista, 2024a). This accessibility has enabled organizations to embrace digital tools for improving efficiency, facilitating remote work, and streamlining communication. However, these technological developments have also introduced challenges, particularly concerning employees using the internet for personal purposes during work hours also known as cyberloafing.

Lim (2002) was the first to operationalize the term "cyberloafing" to refer to employees' voluntary personal emailing and internet browsing during working hours. Other synonymous terms include cyberslacking (Lavoie & Pychyl, 2001) and workplace internet deviance (Zoghbi-Manrique-De-Lara, 2006). More specifically, cyberloafing refers to the use of workplace internet and devices, such as laptops, desktops, and smartphones (Askew et al., 2019), to browse social media or access other non-work-related websites during business hours (Andreassen et al., 2014; Zhang et al., 2019).

Cyberloafing behaviors have become increasingly prevalent as internet access in workplaces has expanded. A 2022 global survey revealed that 50% of employees checked personal emails and messages on work-provided devices, 32% shopped online, and 45% viewed news articles during work hours (Statista, 2024b). While some level of cyberloafing may be harmless, excessive instances can negatively impact employee productivity and organizational efficiency (Andreassen et al., 2014; Farivar & Richardson, 2020).

The COVID-19 pandemic introduced further complexities, accelerating the adoption of remote and hybrid work models. These arrangements, characterized by increased autonomy and

reduced administrative oversight, provided employees with greater opportunities to engage in cyberloafing (Lim, 2002; O'Neill et al., 2014). It has become difficult to balance between work and personal time. Though remote work provides increased flexibility, organizations must come up with strategies to mitigate the risks. In this context, cyberloafing behaviors evolved, reflecting both the opportunities and challenges of remote work environments.

Recognizing the potential impact of cyberloafing on productivity and resource utilization, organizations have implemented various strategies to mitigate these behaviors. Approaches range from restrictive internet policies (Kidwell, 2010) to advanced monitoring systems that leverage artificial intelligence to track employee activities (Oravec, 2023). Many organizations now employ electronic performance monitoring systems to observe, record, and analyze employee activities, aiming to identify and address cyberloafing behaviors (Bhave, 2014; Stanton, 2000).

However, these monitoring systems raise significant concerns about employee privacy and trust. Features like keystroke logging, webcam surveillance, and social media tracking are often viewed as intrusive, potentially harming employee morale and engagement. While these tools may reduce cyberloafing, their overuse can lead to disengagement and dissatisfaction (Zhong et al., 2022).

## **Rationale of the Study**

The COVID-19 pandemic has significantly changed how employees carry out their tasks, communicate with one another, and manage their responsibilities. Cyberloafing is an important area of study because it has a dual nature. On one hand, it can hurt productivity, but on the other hand, it can serve as a way for employees to cope with stress. Before the pandemic, most research focused on traditional work settings, where supervisors could easily monitor employees. However, the rapid switch to remote and hybrid work environments during the pandemic changed this dynamic. Remote work has become the new norm. When employees work from home, cyberloafing increases as there is less chance of detection (Kossek & Lautsch, 2018). The level of direct supervision is not the same. Studying how these behaviors have shifted since COVID-19 helps fill an important gap in understanding employee behavior in today's workplace.

Developing policies and strategies that maintain a balance between employee well-being and productivity requires an understanding of how cyberloafing behaviors have changed over time. Organizations have used electronic performance monitoring technologies and modified their policies in response to cyberloafing. Despite being useful for monitoring productivity, these technologies frequently bring up ethical issues concerning fairness and privacy. This can cause an unfavorable organizational culture, diminished trust, and low working morale. Analyzing these answers is crucial to finding workable solutions for managing cyberloafing without compromising the wellbeing or relationships of employees.

Electronic performance monitoring, such as "bossware," brings emphasis to the increasing moral dilemmas associated with measuring employee performance. These technologies often put the delicate balance between protecting business interests and protecting employee privacy in jeopardy. Addressing the ethical implications of these tools is becoming more and more crucial as they become more widely used.

Although cyberloafing has been extensively studied, the majority of this research has focused on traditional workplace settings. There are currently few studies on how these behaviors have evolved in remote and mixed workplaces, particularly after the pandemic. By examining how cyberloafing actions have been impacted by working from home, how employers respond, and the ethical issues associated with monitoring, this study proposes to fill this gap in understanding through a systematic literature review.

There are systematic literature reviews on cyberloafing in existence, however, they do not address the change in work environment due to the pandemic and how cyberloafing behaviors evolved. As there is no recent publication, this study will also collect data post-COVID-19.

## **Research Objectives**

The objective of this study is to synthesize existing research on cyberloafing behaviors across pre-pandemic, pandemic, and post-pandemic work environments. It also aims to identify the organizational strategies that have been adopted in response to shifts in employee cyberloafing behavior. Additionally, this study seeks to critically assess the ethical considerations associated with the use of electronic monitoring practices in managing cyberloafing. Based on these findings, the study intends to offer practical

recommendations for managing cyberloafing in the workplace while balancing employee well-being and organizational productivity.

## **Research Questions**

To address the evolving nature of cyberloafing and its implications for organizations in the digital workplace, this study seeks to answer the following research questions:

1. How have cyberloafing behaviors evolved from pre- to post-COVID-19 in traditional and contemporary remote work settings?
2. How do changes in cyberloafing behaviors influence organizational responses?
3. What ethical implications arise from using electronic performance monitoring on employees to curb cyberloafing behaviors in the workplace?

## **Research Scope**

This study focuses on cyberloafing behaviors in the workplace. It examines the changes in these behaviors pre- and post-COVID-19 and analyzes how organizations have adapted their policies and practices in response. The study also evaluates the ethical challenges of electronic performance monitoring tools used to manage cyberloafing. The scope is limited to existing literature, ensuring a comprehensive review of the topic within the context of workplace behavior, organizational management, and ethics.

## **Definition of Key Terms**

### **Cyberloafing**

Cyberloafing (or cyberslacking) is defined as “the use of Internet and mobile technology during work hours for personal purposes” (Lim, 2002; Vitak et al., 2011, p. 1751). Examples include browsing social media, blogging, shopping online, gaming or reading personal emails (Askew et al., 2019; Madden, 2009).

## **Pre-COVID-19 Era**

The period before the global outbreak of COVID-19, typically referring to the time before March 2020, when traditional in-office work models predominated.

## **Post-COVID-19 Era**

The period following the initial global outbreak of COVID-19, during which remote and hybrid work arrangements became more widely adopted and normalized.

## **Organizational Response**

Actions, strategies, or policies adopted by companies to address, manage, or mitigate the effects of cyberloafing behaviors among employees.

## **Electric Performance Monitoring**

Electronic performance monitoring (EPM) refers to “the now-common use of technological means to observe, record, and analyze information that directly or indirectly relates to employee job performance” (Bhave, 2014; Stanton, 2000; Jeske & Santuzzi, 2015, p. 101). AI-enabled “bossware” is a subset of EPM and includes keystroke, webcam, social media, and email monitoring (Cappelli, 2020). Other synonyms for EPM include “electronic monitoring, workplace surveillance, workplace monitoring, and computer monitoring” (Jeske & Santuzzi, 2015).

## **Ethics**

Ethics refers to the set of moral principles that direct employees' behavior in determining what is considered right or wrong in their actions and decision-making (Sims, 1992).

## **Traditional Work Setting**

A traditional work setting refers to the conventional model where employees perform their duties primarily at an employer-designated physical location, such as an office. This model is characterized by fixed working hours, direct in-person supervision, and clearly defined boundaries between work and personal spaces.

## **Contemporary Work Setting**

A contemporary work setting refers to modern work arrangements characterized by flexibility in location and scheduling, specifically encompassing remote and hybrid work

models. In this setting, employees may perform their tasks outside of traditional office spaces, such as from home or other remote locations, using digital communication tools.



## CHAPTER II LITERATURE REVIEW

This chapter reviews the concept of cyberloafing, examining its definitions, behaviors, and causes. It then explores how workplace environments have evolved as a result of the COVID-19 pandemic and the implications for employee behavior. Finally, it discusses electronic performance monitoring as a strategy that organizations use to manage cyberloafing, along with the ethical considerations involved.

### Cyberloafing

Cyberloafing is commonly defined as “the use of Internet and mobile technology during work hours for personal purposes” (Lim, 2002; Vitak et al., 2011, p. 1751). It has been extensively studied in traditional office settings. Over the past decade, cyberloafing has emerged under different labels such as “personal internet use”, “mobile loafing”, and “non-business internet use” (Kwak et al., 2021, Lim & Teo, 2024b, Uslu, 2025, p. 3). From these, the most common label is cyberslacking and the definitions are similar. Cyberloafing can involve procrastination due to online diversions, as well as activities like multitasking, unapproved technology-supported breaks, and leisure (Aalbers et al., 2022; Oravec, 2002). Examples include browsing social media, blogging, shopping online, gaming or reading personal emails (Askew et al., 2019; Madden, 2009). These behaviors impact the organizations as employees are less productive, and resources are wasted.

Cyberloafing is “a mixed blessing because it leads not only to resource depletion but also resource recovery” (Kim & Christensen, 2017; Wu et al., 2020; Zhong et al., 2022 p. 2). While cyberloafing may not appear like a great deal at first glance, its cumulative impact can cause major challenges for organizations. On the negative side, cyberloafing is frequently seen as deviant behavior that depletes employees' limited resources and results in lost productivity or additional liabilities (e.g., Askew et al., 2014; Sipior & Ward, 2002). For example, excessive personal usage of work-related technology can cause strained teamwork and inefficiencies in task completion in addition to disrupting workflow. Additionally, such individual use of work-related technology might result in significant issues with internet networks and the effective use of organizational broadband (Venkatraman, 2008). Moreover, organizations often incur indirect

costs, such as increased IT maintenance to manage network congestion or the need for stricter monitoring systems to mitigate misuse.

On the positive side, cyberloafing can have unanticipated advantages since it allows workers to temporarily disconnect from their work in order to recuperate or replenish resources. By providing micro-breaks, cyberloafing enables workers to improve their mental health (Wu et al., 2020), increase work engagement (Syrek et al., 2018), increase time management (Coker, 2011), and cope with work-related stress such as job burnout (Aghaz & Sheikh, 2016). Therefore, by enabling workers to take a break from difficult assignments and come back with new insights, cyberloafing can encourage innovation and problem-solving. Additionally, cyberloafing can promote autonomy by giving employees a sense of control over their work breaks, which has been linked to greater job satisfaction and overall well-being (Lim & Chen, 2012). These short periods of disengagement can serve as cognitive resets, allowing workers to concentrate better and approach their work with greater efficiency.

Interestingly, the frequency and duration of cyberloafing determine how it affects performance (Şimşek, & Şimşek, 2019). Job performance is not negatively impacted by brief and occasional cyberloafing behaviors (Askew, 2012). However, depending on how the job is structured, there are instances where a significant degree of cyberloafing could negatively impact performance. According to Lim and Chen (2012), interactive activities like sending and receiving messages on social media have a greater negative impact on job performance than non-social activities like Internet browsing. Additionally, when an employee's workload is set or defined, there is proof that cyberloafing does not hinder performance because the person exhibits cyberloafing behaviors after finishing the tasks they were given (Blanchard & Henle, 2008).

Whether cyberloafing is conducted via a computer or a mobile device also affects employee satisfaction (Şimşek, & Şimşek, 2019). Employee satisfaction is not correlated with computer cyberloafing, but it correlates with low employee satisfaction when it occurs on a smartphone (Askew, 2012). People with low employee satisfaction tend to be preoccupied with their phones and look for entertaining things to do to distract them from their negative feelings about their work. Compared to cyberloafing on computers, cyberloafing activities on smartphones result in dissatisfaction (Askew, 2012). Another reason for this would be because

smartphones are far more attractive than computers in terms of apps and services (Şimşek, & Şimşek, 2019).

To mitigate the risks of cyberloafing, organizations have implemented internet-related policies in the workplace. This also includes using monitoring and surveillance. An empirical study by Henle et al. (2009) found that the use of technology control systems together with zero tolerance, gradual discipline, and a regular monitoring procedure enhanced the perception of fairness. The presence of a professional and deterrent monitoring system decreased cyberloafing tendencies (Hassan et al., 2015).

### **Impact of COVID-19 on Workplace Dynamics**

The sudden emergence of the Covid-19 pandemic brought about unprecedented disruptions not only in people's personal lives but also in the workplace worldwide. The pandemic has shown how important flexibility and adaptability are in the workplace. Organizations were required to swiftly adjust their operations and support their employees in response to this uncertain time. One such response was for companies to implement telecommuting on a large scale to prevent the spread of the virus and to safeguard their employees' health (de Lucas Ancillo et al, 2023).

Telecommuting involves working outside the main office in alternative locations (Allen et al., 2015). While telecommuting traditionally emphasized the use of technology to replace physical commuting, the COVID-19 pandemic expanded the nature of work arrangements. Consequently, the term remote working is now commonly used to refer to any type of work that is not done in the main office, such as at branches or other business units (Vega et al., 2015). Remote working is also used to describe work performed mainly from home as a result of lockdowns or social distancing requirements, and it is often treated as interchangeable with the concept of working from home (WFH) (McPhail et al., 2024). Another predominant form of working from home as lockdowns are lifted is hybrid working. Many organizations implemented a hybrid work model where employees divided their time in the office and WFH (McPhail et al., 2024). According to Bloom's (2020) research, most employees who are able to WFH preferred the hybrid model. This shift not only altered how work was performed but also challenged long-standing organizational practices and norms.

The COVID-19 pandemic reshaped employee expectations regarding work-life balance, autonomy, and organizational trust. Organizations and managers found it difficult to balance the demands on employees' health and well-being with the company's value and long-term success (Bose et al., 2022). As employees worked remotely, maintaining engagement and cohesion became increasingly challenging. One major issue was the rise of “Zoom fatigue”, a phenomenon describing the mental exhaustion associated with frequent video conferencing. Some employees nevertheless commonly complain of "Zoom fatigue," feeling less connected to their coworkers, or feeling alienated in a WFH or hybrid environment. (Nesher et al, 2022)

In addition, the change to hybrid and remote work increased the daily work hours for those who were employed during the COVID-19 pandemic. Because there were less uninterrupted work hours due to more coordination and communication tasks, such as emails and meetings, productivity decreased. (Gibbs et al., 2023). Although the surge in emails and virtual meetings were initially necessary to maintain coordination during the early stages of the pandemic, employees soon adapted to these digital communication habits and became more selective about which meetings to join or emails to respond to (DeFilippis et al., 2020).

Although employees adjusted to digital communication tools over time, the transition to remote and hybrid work also introduced new challenges related to productivity and behavior. One such challenge was the increased prevalence of cyberloafing. Employees who work from home have more opportunities to access computers for personal leisure when they are on the clock and spend more time in front of screens (Majumdar et al., 2020). Supervisors may also find it more challenging to keep an eye on employee cyberloafing and their use of social media, personal email, and other non-work-related websites during business hours (Mercado et al., 2017).

Tablets, cellphones, and other personal electronics are frequently brought to work by employees nowadays (Alharti et al., 2019). As technology advances, so do the tools and resources available to employees for cyberloafing. The increasing accessibility and portability of these devices have made it easier for employees to cyberloafing behaviors, often without immediate detection. Consequently, organizations are interested in preventing and keeping an eye on cyberloafing as their reliance on the internet to do work-related tasks has grown (Mercado et al., 2017).

## **Electronic Performance Monitoring (EPM)**

Over the past decades, technological advancements have given companies more tools to analyze and track employee performance at work (Kidwell & Sprague, 2009) to capture those who indulge in cyberloafing. Electronic performance monitoring (EPM) refers to “the now-common use of technological means to observe, record, and analyze information that directly or indirectly relates to employee job performance” (Bhave, 2014; Jeske & Santuzzi, 2015, p. 101; Stanton, 2000). These technologies can range from basic tools, such as time-tracking software and email activity logs, to sophisticated systems incorporating artificial intelligence, machine learning, and biometric data collection (Aiello & Kolb, 1995; Stanton, 2000).

EPM was originally used in sectors like manufacturing and call centers that needed high task efficiency. The primary goal of EPM is to increase productivity and ensure compliance with organizational policies. Before the pandemic, organizational strategies included restrictive policies, basic surveillance systems, and establishing norms among employees (Kidwell, 2010).

Since then, it has developed to track a range of workplace behaviors in a variety of industries, especially in remote and hybrid work environments. Keystrokes, mouse movements, application usage, video streams, and even social media activity can all be tracked by modern systems (Oravec, 2023). Many organizations have adopted advanced monitoring systems, often referred to as "bossware," to track employee activity, productivity, and engagement (Oravec, 2023). These tools use artificial intelligence (AI) to identify patterns in online behavior and flag potential cyberloafing activities (Alikhademi et al., 2022). AI-enabled “bossware” is a subset of EPM and includes keystroke, webcam, social media, and email monitoring (Cappelli, 2020).

EPM benefits organizations and employees in a variety of ways. EPM offers transparent information that can be utilized to identify skill gaps and assist personnel growth by monitoring performance measures (Stanton, 2000). For instance, employees can receive targeted feedback through customized performance reports, which helps them become more productive and advance their careers (Aiello & Shao, 1993). Furthermore, by lessening managerial assessments' subjective bias, EPM can promote fairness in performance reviews (Stanton, 2000).

EPM can also greatly increase an organization's efficiency. Managers can efficiently distribute resources and quickly resolve problems with real-time monitoring (Kidwell &

Sprague, 2009). By monitoring employees' active time on tasks, EPM technologies can assist improve service delivery in sectors like customer service, where response times are crucial (Aiello & Kolb, 1995). Additionally, by informing workers that their activities are being watched, EPM can discourage bad workplace behaviors like excessive cyberloafing or misusing organizational resources (Stanton, 2000). Some organizations have even begun integrating wellness-focused activities into their monitoring systems in an effort to combat these issues. For instance, in order to lower stress and stop cyberloafing, AI systems may now advise employees to take mindful breaks or engage in recreational activities (Oravec, 2023).

EPM technologies seek to decrease inefficiencies, identify areas for improvement, and optimize workflows by giving managers access to real-time data (Kidwell & Sprague, 2009). However, as EPM spreads, serious concerns are raised regarding its effects on organizational ethics and employee well-being. These technologies are frequently criticized for being intrusive. The success of EPM systems has been the subject of conflicting study, with concerns over privacy, fairness, and employee stress coexisting with increased productivity (Chalykoff & Kochan, 1989; Lund, 1992).

Concerns over employee privacy and trust have been raised by features like social media tracking, keystroke recording, and webcam surveillance (Oravec, 2023). According to studies, although these technologies help lessen cyberloafing, they may also lower employee morale, which could result in disengagement and discontent (Zhong et al., 2022). Monitoring procedures go against established standards of employee autonomy and privacy, especially when they entail ongoing surveillance. Although these policies are intended to increase productivity and decrease cyberloafing, they may also foster a culture of mistrust and a sense of micromanagement among employees (Kuschnaroff & Bayma, 2014).

In a number of legal and cultural situations, the practice of monitoring employees without their express consent has been recognized as a violation of their right to privacy. The conflict between corporate monitoring and constitutional liberties is highlighted by the fact that in certain instances, indiscriminate surveillance, such as the interception of employee emails, has been declared unlawful under labor regulations (Kuschnaroff & Bayma, 2014). Furthermore, when employees believe their liberty is being compromised, regulations that fail to strike a balance

between corporate needs and employee privacy frequently lower morale and cause discontent (Kuschnaroff & Bayma, 2014).

Moreover, discussions concerning fairness and transparency have been triggered by the application of predictive analytics in cyberloafing management. For example, algorithms that forecast cyberloafing tendencies frequently depend on inaccurate or skewed data, raising questions regarding the precision and morality of such actions (Oravec, 2023). Although the goal of these systems is to increase productivity, they may unintentionally perpetuate stereotypes or unfairly punish workers for actions that are not actually counterproductive (Alikhademi et al., 2022).

To summarize this chapter, although prior studies have examined a broad range of individual, organizational, and contextual factors influencing cyberloafing, several research gaps remain. First, there is limited comparative insight into how cyberloafing behaviors have evolved across different work settings, particularly in response to the shift from traditional to remote or hybrid models following the COVID-19 pandemic. Second, ethical concerns related to monitoring cyberloafing are often underexamined, despite growing interest in employee surveillance technologies. Third, there is a lack of synthesis regarding how organizations respond to cyberloafing and whether those responses reflect punitive or supportive strategies. These gaps underscore the need for a systematic review that not only maps the trends in cyberloafing research but also critically examines how it is understood and managed in contemporary work contexts—providing the foundation for the research questions guiding this study.



## CHAPTER III RESEARCH METHODS

This chapter presents the research methods used in this study. It details the step-by-step procedure used to conduct the systematic literature review, including the research approach, search and selection strategy, coding framework, data collection and analysis techniques.

### Research Approach

A systematic literature review (SLR) is the main research design for this study. A SLR finds, selects, and evaluates research (Dewey & Drahotka, 2016). This approach can summarize a large amount of research on cyberloafing behaviors, especially how they changed pre- and post-COVID-19. A systematic literature review also offers an organized method of answering the research questions through the analysis of a wide variety of peer-reviewed papers, reports, and theoretical contributions.

### Research Procedure

This section outlines and describes the 10-step process followed in conducting the study. The overall research procedure is illustrated in Figure 3.1, with each step explained in detail in the following subsections. This structured approach was used to ensure consistency, transparency, and rigor throughout the review process.

#### 1. Identify the Topic

The topic of cyberloafing was chosen based on observed behavioral shifts in the workplaces, particularly in the post-COVID-19. The researcher noted increasing concerns around productivity, monitoring, and ethical challenges in remote and hybrid work environments. This prompted an exploration of how cyberloafing behaviors have evolved and been addressed by organizations.

## **2. Review of the Literature**

A preliminary literature review was conducted to explore the scope of existing research, clarify definitions of cyberloafing, and identify common theories and methodologies used. This helped build foundational knowledge and confirmed the need for a focused review of post-pandemic studies.

## **3. Identify the Problem and Research Gaps**

After reviewing the literature, a gap was identified regarding how cyberloafing behaviors have changed over time, particularly before, during, and after the COVID-19 pandemic. There was also limited research synthesizing organizational responses and ethical considerations related to monitoring practices. This gap framed the direction of the study.

## **4. Develop Research Objectives and Questions**

Clear research objectives and questions were developed to guide the review. The study aimed to: (1) examine the evolution of cyberloafing behaviors, (2) identify organizational responses, and (3) explore ethical concerns regarding electronic monitoring. These objectives shaped the development of inclusion criteria and the coding framework.

## **5. Identify Research Method**

A systematic literature review (SLR) approach was selected as the most appropriate method to address the research questions. This method allows for a structured, transparent, and replicable process for identifying, evaluating, and synthesizing relevant studies. Unlike narrative reviews, the SLR approach enables the identification of trends and gaps across a broader body of literature while maintaining methodological rigor.

## **6. Develop Inclusion Criteria and Coding Procedures**

The inclusion and exclusion criteria were established to ensure the quality, relevance, and consistency of the articles selected for analysis. The criteria were guided by the study's research

questions and objectives. In addition, a structured coding framework was developed to systematically extract relevant data from each article.

## **7. Screen and Select Articles**

An extensive literature search was conducted to identify studies that examined cyberloafing behaviors in the workplace. Each article was carefully screened and selected based on the inclusion criteria. The final selection was documented using a PRISMA flow diagram to ensure transparency in the review process.

## **8. Code Articles**

Following selection, each included article was carefully reviewed and coded using the pre-established Excel coding matrix. The coding captured key information relevant to the study. This structured approach ensured consistency in data extraction and laid the groundwork for effective synthesis and analysis.

## **9. Analyze the Data**

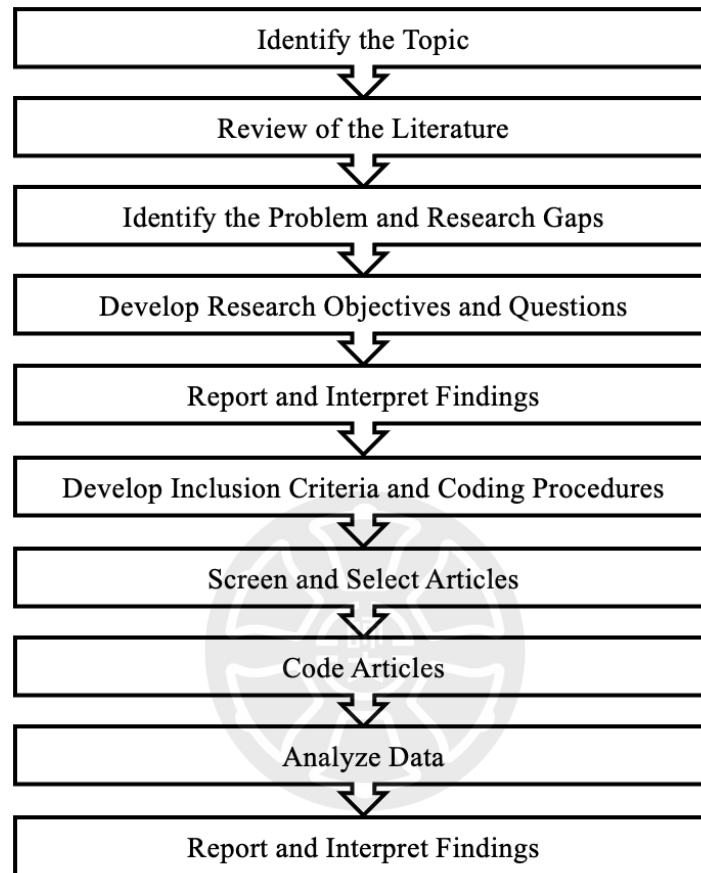
The coded data were synthesized and organized according to emerging themes and the study's research questions. A thematic analysis approach was used to identify patterns and trends across studies, such as how cyberloafing behaviors have evolved, how organizations have responded, and how ethical concerns around EPM have been addressed. The findings were grouped into categories that aligned with the study's objectives and visually represented using concept maps and summary tables.

## **10. Report and Interpret Findings**

Finally, the results of the systematic literature review were reported in a structured manner in Chapter 4. Each theme was interpreted in relation to the research questions, and comparisons were made across different time periods, geographical contexts, and theoretical lenses. Recommendations for practice and future research were also discussed based on the synthesized findings.

**Figure 3.1**

*Research Procedure*



*Note.* This figure illustrates the step-by-step research procedure used in the systematic literature review.

### **Data Collection**

To provide a fair and objective overview of the research available, SLR seeks to locate all studies that address a specific subject (Nightingale, 2009). There are three steps for the literature review process: systematic literature search, inclusion criteria, and coding procedure.

## Literature Search

An academic search was conducted of academic databases, including Google Scholar, ProQuest, Scopus, Science Direct, and ACM Digital Library. The search was opened to journals, books, dissertations, thesis, conference papers, etc. Specific search terms such as *cyberloafing*, *cyber-loafing*, *cyber loafing* and *cyberslacking* in the article title were used to identify relevant literature in these databases. This study restricted the search criteria by excluding articles with the keyword's *student*, *students*, and *education* in the title as this study focuses on cyberloafing in the workplace. In addition, the search was limited to articles published between 2020 to 2024 to ensure the research reflects contemporary workplace trends, especially those influenced by the COVID-19 pandemic. To ensure a comprehensive initial retrieval, titles, abstracts, and keywords were screened, followed by full-text reviews of studies that met the preliminary criteria.

## Inclusion Criteria

To maintain the relevance, focus, and quality of the systematic review, clear inclusion criteria was established prior to the screening process. These criteria served as the foundation for evaluating which studies would be retained for full analysis. Only literature that directly aligned with the study's objectives—specifically addressing cyberloafing in organizational settings—was considered. The criteria ensured consistency in article selection and helped to eliminate studies that fell outside the scope of the research. Included studies met the following criteria:

- Focused explicitly on cyberloafing in workplace settings.
- Sample populations included full-time or part-time employees. These may include teachers, and part-time students as they are simultaneously engaged in employment.
- Excluded studies focusing solely on full-time students in educational settings.
- Published between 2020 and 2024.
- Written in English.
- Accessible in full text.

## Summary of Literature Search and Inclusion Result

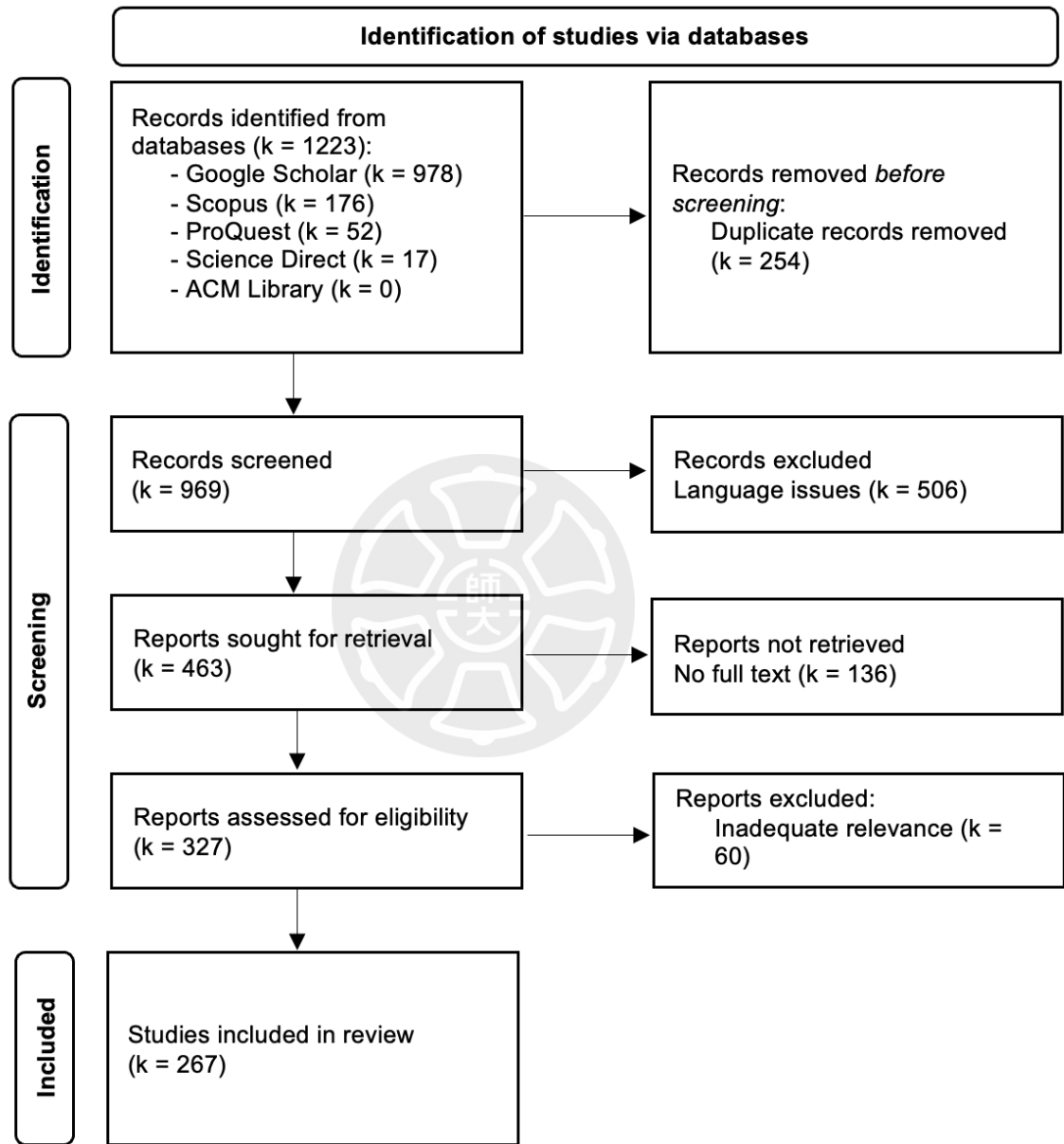
An initial pool of 1,223 records were identified across five databases: Google Scholar (k = 978), Scopus (k = 176), ProQuest (k = 52), ScienceDirect (k = 17), and the ACM Digital Library (k = 0). The search was limited to English-language studies published between 2020 and 2024 that focused on cyberloafing in the workplace.

Following the initial search, 254 duplicate records were removed, leaving 969 unique articles for screening. During the screening phase, titles and abstracts were reviewed, and 506 articles were excluded due to language issues. This resulted in 463 articles being retained for full-text retrieval.

At the retrieval phase, 136 articles were not accessible in full text and were therefore excluded. The remaining 327 full-text articles were assessed for eligibility based on predefined inclusion criteria. Following full-text review, 59 articles were excluded due to lack of relevance to workplace cyberloafing or their focus on student populations. In total, 267 articles met all inclusion criteria and were included in the final analysis. These studies were fully coded using the structured coding scheme and formed the basis for the thematic synthesis presented in Chapter 4. Figure 3.2 outlines the flow chart that shows the literature screening process.

**Figure 3.2**

*Literature Screening Process Using PRISMA 2020 Flow Diagram*



*Note.* Adapted from “The PRISMA 2020 statement: An updated guideline for reporting systematic reviews”, by Page, M. J. et al., 2021.

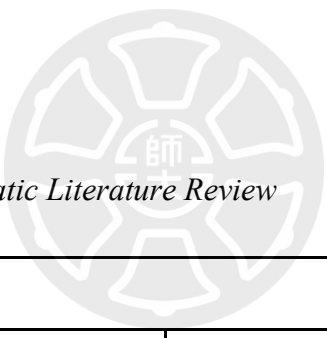
## Coding Procedure

Following the final screening and selection of articles, each study was coded systematically using a structured Excel spreadsheet. The coding process was designed to extract consistent and relevant information across all included studies, ensuring that key data aligned with the study's research objectives and questions. This structured approach also enhanced the transparency and reproducibility of the review.

The coding sheet was developed by the researcher and organized into multiple categories, capturing both descriptive and analytical elements of each article. Data was extracted manually by reading the full text of each article and entering the information into the corresponding coding fields. The coding process was regularly reviewed to ensure accuracy and consistency. The coding scheme used in the study is shown in Table 3.1. See Appendix A for a sample of the coded included studies.

**Table 3.1**

*Coding Scheme Used in the Systematic Literature Review*



Variable	Coding
<b>Searching process</b>	
Search date	Text
Search keyword	Text
Database	1. Google Scholar 2. Scopus 3. ProQuest 4. ScienceDirect 5. ACM Digital Library

(continued)

**Table 3.1***Coding Scheme Used in the Systematic Literature Review (continued)*

Variable	Coding
<b>Source</b>	
Name of Journal	Text
Research title	Text
Year published	Text
Author	Text
Fields published	1. Organizational Management 2. Medical & Public Health 3. Social Science 9. Other
Study type	1. Journal articles 2. Conference paper 3. Bachelor's thesis 4. Master's thesis 5. Doctorate's dissertation 9. Other
<b>Topic discussed</b>	
Definition	Text
Antecedents	Text
Mediator	Text
Moderator	Text
Theoretical lens applied	Text
Generational difference discussed	1. Yes 2. No

(continued)

**Table 3.1***Coding Scheme Used in the Systematic Literature Review (continued)*

Variable	Coding
EPM used	1. Yes 2. No
Ethical implications of EPM	Text
<b>Methodology</b>	
Sample Collection Period	1. Pre-Covid (Before 2020) 2. During Covid (2020-2022) 3. Post-Covid (2023-2024)
Research Design	1. Opinion/commentary 2. Literature review 3. Quantitative data collection 4. Qualitative data collection 5. Mixed methods data collection 6. Secondary data analysis 9. Other
Geographical focus	1. None (Universal) 2. North American countries 3. South American countries 4. European countries 5. Asian countries 6. African countries 7. Oceania countries 8. Multiple region countries 9. Other
<b>Conclusion</b>	
Prevalence of cyberloafing in post-pandemic era	Text
Employee outcomes	Text
Organizational outcomes	Text

(continued)

**Table 3.1**

*Coding Scheme Used in the Systematic Literature Review (continued)*

<b>Variable</b>	<b>Coding</b>
Interventions/remedies	Text
Organization policies	Text
Future research suggestions	Text
Others	Text

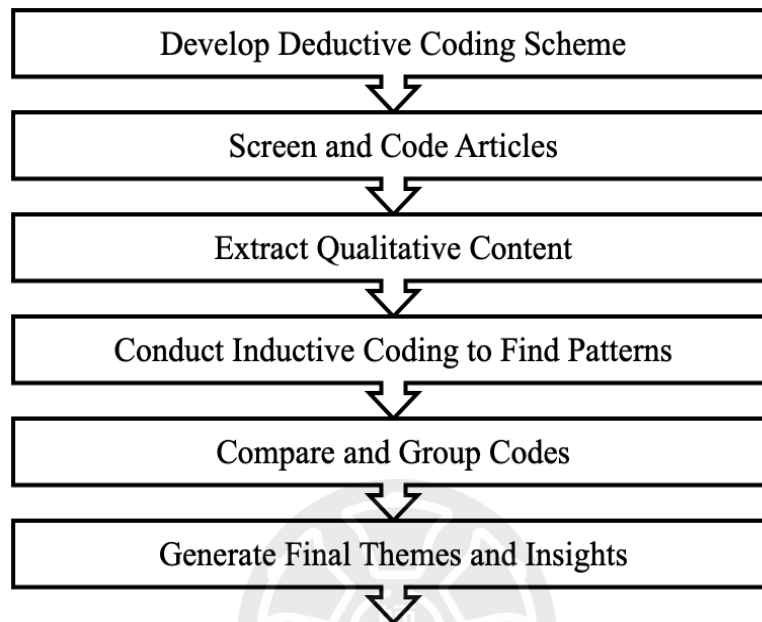
*Note.* This table presents the coding categories and definitions applied to the 267 included articles during the systematic literature review.

### **Data Analysis**

Deductive content analysis and inductive thematic synthesis were combined in this study's approach to data analysis. Analyzing patterns and themes in the development of cyberloafing behaviors, organizational responses, and ethical issues with EPM in the workplace pre-, during, and post-COVID-19 was the main objective of the study. The process of the data analysis can be seen in Figure 3.3.

**Figure 3.3**

*Data Analysis Process*



*Note.* This figure outlines the step-by-step data analysis process used in this systematic literature review.

Data analysis began with a deductive approach based on a structured coding scheme developed prior to data collection. This was used to extract consistent, relevant information from each article and to group studies under predefined categories. Each article was read in full and manually coded into the corresponding categories. The use of structured codes allowed for consistency in comparison across studies and facilitated frequency counts and descriptive summaries. This approach follows the principles of deductive content analysis as described by Elo and Kyngäs (2008), where analysis is guided by pre-established categories and a coding scheme.

While the coding categories were established deductively, themes within those categories were identified inductively. The researcher closely examined the qualitative content of each coded field and identified recurring ideas, patterns, and conceptual similarities. Using the constant comparative method, the researcher grouped similar codes and condensed them into

broader themes. This phase of the analysis was inspired by the three-stage process outlined by Thomas and Harden (2008): (1) coding text line-by-line, (2) developing descriptive themes, and (3) generating analytical themes based on pattern recognition.

To support interpretation, coded results and themes were summarized using frequency tables, thematic matrices, and concept maps. These visual tools helped structure the presentation of findings in Chapter 4, ensuring a clear connection between the coded data, emergent themes, and the research objectives.

## **Research Quality**

Establishing research quality in a systematic literature review involves demonstrating both validity and reliability, as well as maintaining transparency throughout the review process. In this study, multiple strategies were used to ensure that the findings are credible, consistent, and transferable.

### **Credibility**

Credibility or internal validity refers to the degree to which the results can be applied to practice (Merriam, 2009). To establish credibility, the study adhered to the PRISMA 2020 guidelines for article selection and reporting, ensuring that relevant articles were identified and documented. The inclusion criteria were grounded in the research questions and limited to studies that directly addressed cyberloafing in the workplace and were published between 2020 and 2024 to ensure topic relevance.

The thematic synthesis approach employed in this study followed the structured method proposed by Thomas and Harden (2008). This approach enabled the synthesis to remain grounded in the original data while also allowing the generation of new insights that go beyond individual studies. The hybrid use of deductive and inductive coding further reinforced credibility by balancing pre-existing theory with emergent data patterns (Thomas & Harden, 2008).

## **Consistency**

Consistency relates to the reliability and dependability of the review process. To enhance consistency, a coding scheme was developed prior to data extraction, and all 267 articles were coded using the same variables. These included article descriptive information, independent and dependent variables, mediators, moderators, theoretical lenses, ethical concerns, and geographical focus.

The use of a structured coding protocol and repeated verification of data entries ensured that interpretations were consistent across studies. The coding was conducted in iterative rounds to minimize errors, and analytic decisions were documented to maintain a clear audit trail. This approach aligns with the principle that consistency in qualitative research is demonstrated not by replication of results, but by a logical and transparent process that others can follow (Merriam, 2009).

## **Transferability**

Transferability or external validity refers to the degree to which the results can be applied practically in various contexts (Merriam, 2009; Mertens, 2005). While the primary focus of this SLR was on cyberloafing behaviors in post-pandemic work environments, careful documentation of contextual details allows readers to assess whether the findings are relevant to their own settings (Mertens, 2005).

To further increase transferability, the synthesis highlighted patterns across various geographical regions and theoretical lenses. The findings were contextualized in the larger organizational and technological changes brought about by the COVID-19 pandemic. The presentation of descriptive and analytical themes offers thick description and enables readers to evaluate the applicability of insights to related contexts, as recommended by Guba and Lincoln (1989).

## CHAPTER IV FINDINGS AND DISCUSSION

This chapter presents the findings of the systematic literature review on cyberloafing in the workplace. Drawing from 267 peer-reviewed articles published between 2020 and 2024, the analysis synthesizes how cyberloafing behaviors have evolved over time, how organizations have responded, and what ethical and practical implications have emerged from these developments. The chapter begins by outlining the characteristics, and methodological profiles of the included studies. It then addresses the study's three research questions by examining the evolution of cyberloafing behaviors, the organizational strategies employed to manage them, and the consequences observed at the employee and organizational levels. The final sections highlight ethical concerns related to electronic performance monitoring (EPM) and present a thematic summary of future research directions identified in the literature

### Context and Characteristics of Included Studies

This section outlines the foundational context of the 267 studies included in the review. It begins by providing a descriptive summary of the literature's key characteristics. This includes the research design, geographical focus, theoretical lenses, and commonly studied variables. Together, these elements establish the groundwork for the thematic analyses that follow.

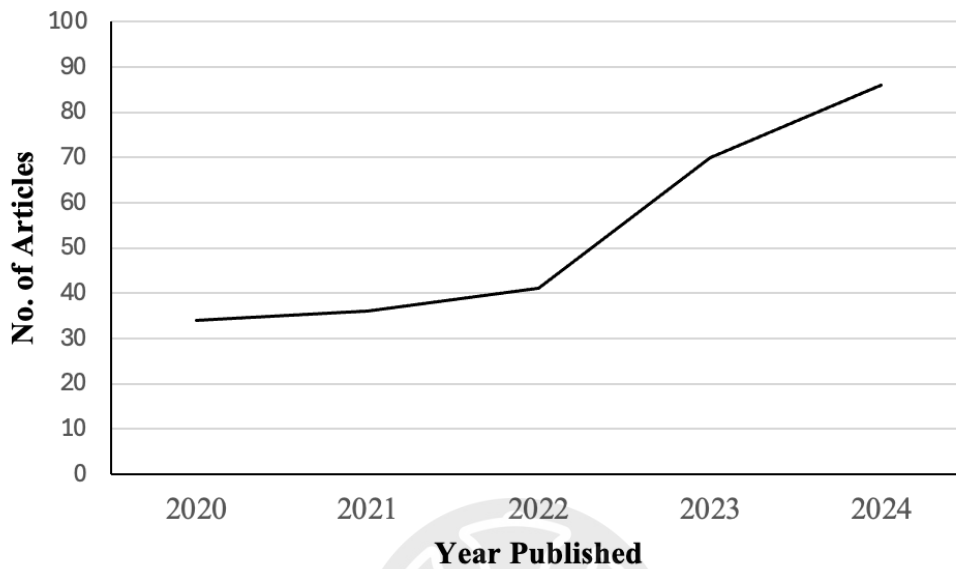
### Descriptive Characteristics of Included Studies

#### *Years of Publication*

According to an analysis of publication trends, research on cyberloafing significantly increased between 2020 and 2024. Figure 4.1 illustrates the steady annual increase in published studies, which reflects the growing scholarly interest in cyberloafing in light of shifting workplaces, especially as a result of the COVID-19 pandemic. The surge in 2023 and 2024 may also indicate a delayed but focused research response to changes in work arrangements and behavioral patterns.

**Figure 4.1**

*Growth of Cyberloafing Literature by Year*



*Note.* This figure presents the annual count of articles related to cyberloafing from 2020 to 2024. Data were extracted from a systematic review of 267 articles focused on cyberloafing behaviors in workplace settings.

### ***Geographical Focus***

The majority of studies included in this review were conducted in Asian countries, accounting for 205 out of 267 articles. This concentration indicates that cyberloafing has been more extensively studied in Asian contexts compared to other regions. This geographic imbalance may be attributed to several factors. Firstly, rapid technological adoption in many Asian countries has significantly reshaped workplace dynamics, creating both opportunities and challenges in managing employees' cyberloafing behaviors. Secondly, cultural views on productivity and diligence common in many Asian societies might lead researchers and organizations to closely scrutinize behaviors perceived as potentially undermining work efficiency. Lastly, extensive academic research funding and institutional support within Asian countries could have facilitated greater exploration and documentation of workplace phenomena, including cyberloafing.

Other regions, such as North America, Africa, and Europe, were represented to a much lesser extent, while South America and Oceania had only one study each. A small number of studies did not specify a geographical focus or involved multiple regions. This distribution highlights a potential geographic imbalance in the literature, which may influence how cyberloafing is conceptualized and studied. Table 4.1 provides a breakdown of the geographical distribution of the included studies.

**Table 4.1**

*Geographical Focus of Included Studies on Cyberloafing*

<b>Geographical Focus</b>	<b>No. of Articles</b>
None (Universal)	24
North American Countries	11
South American Countries	1
European Countries	6
Asian Countries	205
African Countries	15
Oceania Countries	1
Multiple Regions	3
Other	1
<b>Total</b>	<b>267</b>

*Note.* This table presents the distribution of the 267 studies included in the systematic literature review based on their geographical focus.

***Sample Collection Periods***

From the included studies, it is evident that there is a stronger focus on post-pandemic work environments. A significant number of studies collected data during or after the COVID-19 pandemic, while fewer drew from pre-pandemic samples. Additionally, most studies did not

report the data collection period, indicating either reliance on secondary data or a lack of methodological detail. Please see Table 4.2 below for a summary of the sample collection periods represented in the included studies.

**Table 4.2**

*Distribution of Included Studies by Sample Collection Period*

<b>Sample Collection Periods</b>	<b>No. of Articles</b>
Pre-Covid-19	17
During Covid-19	45
Post-Covid-19	12
Pre- and During Covid-19	3
During and post-Covid-19	1
Unspecified	188
<b>Total</b>	<b>267</b>

*Note.* This table categorizes the studies based on when data were collected: pre-COVID-19 (before 2020), during COVID-19 (2020–2022), post-COVID-19 (2023–2024), and unspecified periods.

### ***Research Design***

The majority of the studies included in this review employed quantitative research designs. As shown in Table 4.3, 222 out of 267 articles used quantitative methods, reflecting a strong reliance on surveys, experiments, and statistical analyses to examine cyberloafing behaviors and their associated variables. Mixed methods and literature review articles followed, though in much smaller numbers. Only a limited number of studies utilized qualitative approaches or secondary data analysis, and a few were categorized as opinion or commentary pieces. This distribution highlights the field’s strong preference for empirical generalizability over exploratory or interpretive approaches in the study of cyberloafing.

**Table 4.3***Distribution of Included Studies by Research Design*

Research Design	No. of Articles
Quantitative	222
Mixed Methods	15
Literature Review	13
Qualitative	9
Opinion/Commentary	5
Secondary Data Analysis	3
Other	0
Total	267

*Note.* This table presents the classification of research designs used in the included studies.

Studies were categorized as follows: (1) *Opinion/Commentary* refers to conceptual or viewpoint articles without empirical data; (2) *Literature Review* includes narrative or systematic reviews; (3) *Data Collection (Quantitative)* involves the use of surveys, experiments, or other numerical data-gathering methods; (4) *Data Collection (Qualitative)* includes interviews, focus groups, or content analysis; (5) *Data Collection (Mixed Method)* incorporates both qualitative and quantitative approaches; (6) *Secondary Data Analysis* uses pre-existing datasets; and (9) *Other* includes studies that did not fit into the above categories.

### ***Theoretical Lens Applied***

A diverse range of theoretical frameworks has been employed to examine cyberloafing, highlighting the multifaceted and interdisciplinary nature of the phenomenon. Table 4.4 presents the ten most frequently applied theoretical lenses found across the 267 reviewed studies. The most commonly used framework was the Conservation of Resources (COR) Theory (n = 38), which explains cyberloafing as a response to resource depletion and a strategy for resource recovery. This was followed by Social Exchange Theory (n = 28), which frames cyberloafing as

a form of reciprocal behavior that may emerge when employees perceive imbalance or unfairness in their work environment.

Other prominent frameworks include the Job Demands–Resources (JD-R) Model/Theory (n = 13) and the Theory of Planned Behavior (n = 13), both of which focus on how job characteristics and individual intentions shape cyberloafing behavior. Social Learning Theory (n = 11) and Social Cognitive Theory (n = 10) explore how observational learning and self-regulation influence engagement in such behaviors. Similarly, Self-Determination Theory (n = 10) and General Strain Theory (n = 10) were used to explain cyberloafing through the lens of motivation, autonomy, and psychological strain.

Less frequently, the Ego Depletion Theory (n = 9) and Big Five Personality Theory (n = 7) were applied to examine how personality traits and cognitive fatigue contribute to cyberloafing tendencies. The range of frameworks underscores the complexity of cyberloafing and reinforces the need for integrative models that account for both contextual and individual-level variables. See Appendix B for the full list of theoretical lenses applied in the included studies.

**Table 4.4**

*Top 10 Theoretical Lens Applied in Included Studies*

<b>Theoretical Lens</b>	<b>Frequency (n)</b>
Conservation of Resources Theory	38
Social Exchange Theory	28
Job Demands-Resources Model/Theory	13
Theory of Planned Behavior	13
Social Learning Theory	11
Social Cognitive Theory	10
Self-Determination Theory	10

(continued)

**Table 4.4**

*Top 10 Theoretical Lens Applied in Included Studies (continued)*

<b>Theoretical Lens</b>	<b>Frequency (n)</b>
General Strain Theory	10
Ego Depletion Theory	9
Big Five Personality Theory	7

*Note.* This table displays the top theoretical frameworks used in the 267 articles reviewed.

***Key Variables***

A range of variables were examined across the included studies, either as antecedents, mediators, moderators, or outcomes. The variables were identified based on how frequently they appeared in each respective category. Among antecedents, cyberloafing appeared most frequently (n = 70), followed by job stress (n = 16) and workload (n = 15), indicating a strong focus on work-related pressures as drivers of cyberloafing. Self-control (n = 9) and abusive supervision (n = 9) were also commonly studied, highlighting the relevance of individual traits and negative leadership experiences.

As mediators, cyberloafing (n = 12) and emotional exhaustion (n = 10) were most frequent, suggesting that these variables are often examined as mechanisms linking stressful work environments to behavioral outcomes. Other mediators such as job stress, work engagement, and moral disengagement also appeared, though less frequently.

For moderators, cyberloafing (n = 8), organizational commitment (n = 5), and mindfulness (n = 4) were the most studied, with a few studies examining gender (n=3) and need for achievement (n = 2). These variables were used to test under what conditions relationships involving cyberloafing become stronger or weaker.

As an outcome, cyberloafing was overwhelmingly the most studied dependent variable (n = 195), followed by employee performance (n = 26), job performance (n = 13), employee productivity (n = 4), and organizational commitment (n = 4). These findings confirm that

cyberloafing is not only studied as a behavioral driver but also as a central outcome of interest in workplace research. Table 4.5 summarizes the five most frequently studied variables in each category. See Appendix C for the full list of antecedents, Appendix D for the full list of mediators, Appendix E for the full list of moderators, and Appendix F for the full list of outcomes.

**Table 4.5**

*Top 5 Antecedents, Mediators, Moderators, and Outcomes in Included Studies*

Category	Frequency (n)
<b>Antecedent</b>	
Cyberloafing	70
Job Stress	16
Workload	15
Self-Control	9
Abusive Supervision	9
<b>Mediator</b>	
Cyberloafing	12
Emotional Exhaustion	10
Job Stress	10
Moral Disengagement	5
Work Engagement	4
<b>Moderator</b>	
Cyberloafing	8
Organizational Commitment	5
Mindfulness	4

(continued)

**Table 4.5***Top 5 Antecedents, Mediators, Moderators, and Outcomes in Included Studies (continued)*

<b>Category</b>	<b>Frequency (n)</b>
Gender	3
Need for Achievement	2
<b>Outcome</b>	
Cyberloafing	195
Employee Performance	26
Job Performance	13
Employee Productivity	4
Organizational Commitment	4

*Note.* This table presents the five most frequently identified variables in each category across the reviewed studies. Variables with the same frequency are ordered alphabetically. Subcategories of cyberloafing were grouped under a single label, "Cyberloafing."

***EPM Used***

The use of electronic performance monitoring (EPM) varied significantly across geographical regions. Studies conducted in Asian countries were more likely to report the use of monitoring technologies. African countries had the highest proportion of EPM usage relative to their total (4 out of 15), followed by studies coded as "None (Universal)" and those from North America. Few studies from European, Oceanic, or multiple regions reported EPM use, and no South American studies in the sample reported it at all. This distribution suggests that while EPM is not widely reported overall, its presence varies across regions. A summary of EPM use by geographical focus is provided in Table 4.6 below.

**Table 4.6***Use of EPM by Geographical Focus*

<b>Geographical Focus</b>	<b>EPM Used</b>	<b>EPM Not Used</b>
None (Universal)	7	17
North American Countries	3	8
South American Countries	0	1
European Countries	1	5
Asian Countries	9	196
African Countries	4	11
Oceania Countries	1	0
Multiple Regions	1	2
Other	0	1
<b>Total</b>	<b>26</b>	<b>242</b>

*Note.* This table summarizes the distribution of studies that reported the use of electronic performance monitoring (EPM) across different geographical regions. “Yes” indicates studies where EPM tools were reported, while “No” indicates studies where EPM was not used. “Not Specified” includes studies that did not mention EPM explicitly.

### **Cyberloafing: Definition, Evolution, Causes and Outcomes**

This section presents findings on the definitions, evolution, causes, and outcomes of cyberloafing from the 267 included studies. It first summarizes the different ways cyberloafing is

conceptualized, then describes shifts in cyberloafing behaviors from pre- to post-pandemic contexts. Finally, key themes regarding the causes and outcomes of cyberloafing are identified and discussed.

## Definition of Cyberloafing

The term cyberloafing generally refers to the use of workplace internet access for non-work-related purposes during working hours (Askew et al., 2014; Lim, 2002; Lim & Teo, 2005). It is often classified under the broader category of counterproductive work behavior (CWB) but is also discussed in relation to concepts such as workplace production deviance (Lim, 2002; Lim & Teo, 2005). While most studies agree that cyberloafing involves the misuse of company time and resources, the definitions used across the literature vary in scope and emphasis. Table 4.7 summarizes a selection of commonly cited definitions from the reviewed literature, illustrating the range of perspectives used to conceptualize cyberloafing in contemporary workplace research.

**Table 4.7**

*Common Definitions of Cyberloafing Based on Thematic Emphasis*

Definition	Emphasis	Authors
Cyberloafing is defined as the use of an organization's internet access by employees for personal purposes during work hours.	General	Lim (2002); Askew et al. (2014); Lim & Teo (2005)
Cyberloafing is a workplace deviance where the employees intentionally avoid doing work during work hours.	Intentionality	Lim (2002); Kim & Byrne (2011); Lim & Chen (2012); Sawitri (2012); Duran & Metin-Orta (2024); Wang et al. (2023)

(continued)

**Table 4.7***Common Definitions of Cyberloafing Based on Thematic Emphasis (continued)*

<b>Definition</b>	<b>Emphasis</b>	<b>Authors</b>
Cyberloafing refers to the use of ICTs, such as computers, smartphones, and internet, by employees for personal purposes at work.	Technology/Device Use	Mercado et al. (2017); Tandon et al. (2021)
Cyberloafing involves engaging in non-work-related online activities, such as checking personal emails, shopping, or using social media during office hours.	Non-Work-Related Online Activity Behavior	Koay (2018); Koch & Nafziger (2016); Sapkota et al. (2024); Wu et al. (2023)

*Note.* This table presents a summary of commonly used definitions of cyberloafing as found in the included studies, categorized by thematic emphasis. Author citations are provided for reference.

As shown in Table 4.7, cyberloafing is defined in various ways across the literature. The first category reflects a general definition, describing cyberloafing as the use of workplace internet access for personal purposes during work hours (Askew et al., 2014; Lim, 2002; Lim & Teo, 2005), without assigning intent or moral judgment. The second category emphasizes intentionality, portraying cyberloafing as a deliberate act of workplace deviance where employees knowingly avoid work responsibilities (Duran & Metin-Orta, 2024; Kim & Byrne, 2011; Lim, 2002; Lim & Chen, 2012; Sawitri, 2012; Wang et al., 2023). The third category focuses on technology or device use, highlighting the specific tools involved, such as computers, smartphones, and internet platforms, used for non-work purposes (Mercado et al., 2017); Tandon et al., 2021). Lastly, some studies adopt an activity-based perspective, identifying cyberloafing through specific behaviors like reading personal emails, online shopping, or browsing social

media (Koay, 2018; Koch & Nafziger, 2016; Sapkota et al., 2024; Wu et al., 2023). These thematic distinctions reveal how cyberloafing has been conceptualized across the literature, ranging from a neutral activity to a form of deliberate deviance. This variation in definition reflects an ongoing debate in the literature about whether cyberloafing should be treated solely as a counterproductive act or as a more complex, context-dependent behavior.

## **Evolution of Cyberloafing**

Although it was initially expected that the studies would provide statistical comparisons of cyberloafing behaviors across time, such evidence was largely absent. None of the included studies provided direct statistical comparisons between pre- and post-COVID samples. Instead, the majority of studies made narrative claims or interpretive observations about changes in cyberloafing behavior over time. Table 4.8 presents a summary of the evolution of cyberloafing categorized by three distinct timeframes: pre-COVID, during COVID, and post-COVID. This thematic organization captures trends in employee internet use and employer interpretations over time.

Few studies using pre-COVID-19 samples reported specific cyberloafing scores. For example, Aciksoz et al. (2024) found a mean score of 2.62 ( $\pm 0.90$ ) on a 5-point Likert scale, suggesting that cyberloafing occurred “sometimes.” Similarly, Hensel and Kacprzak (2020) reported an average cyberloafing time of 54.6 minutes per day. In Seçkin et al. (2021), employees with high burnout levels admitted to engaging in cyberloafing during work hours, engaging in activities such as browsing social media, reading news, watching videos, and shopping online. These behaviors were largely framed as deviant or passive in nature.

During the COVID-19 pandemic, many studies explored how remote work and telecommuting influenced cyberloafing behavior. Quantitative findings from this period reflect a general trend of moderate cyberloafing. For instance, Reizer et al. (2022) reported a mean score of 3.64 ( $\pm 1.47$ ) on a 7-point Likert scale, while Zhong et al. (2022) found a similar mean score of 3.52 ( $\pm 1.30$ ), suggesting moderate levels of cyberloafing during remote work. In both studies, cyberloafing was described as a response to stress and exhaustion, with potential benefits such as innovation under strain. Novianti and Sjabadhyni (2021), using a 4-point scale, found a lower mean score of 2.06 ( $\pm 0.33$ ) among 2,349 government employees working from home in

Indonesia. Their study also revealed that cyberloafing significantly mediated the relationship between negative work-home interactions and psychological distress.

Some studies noted changes in cyberloafing based on worker perceptions. For example, Buntarangin and Frantzen (2022) reported a noticeable increase in cyberloafing among employees in Pakistan after transitioning to remote work, citing autonomy, lack of supervision, and blurred work-life boundaries as contributing factors. Similarly, Khorakian et al. (2023) found that cyberslacking was common and negatively impacted work performance in remote environments. However, not all studies found a measurable increase. Hernandez (2022) reported no statistically significant difference in cyberloafing levels between workers who were remote before and during the pandemic.

In the post-COVID-19 context, many studies described cyberloafing as increasingly prevalent and more normalized in hybrid and remote work settings. For example, Hurriyati and Marlinda (2023) found that 84.2% of employees exhibited high levels of cyberloafing, with job stress cited as a primary contributing factor. Similarly, Tomoloju (2024) confirmed a high prevalence of cyberloafing among Nigerian civil servants and attributed this trend to smartphone use, social media access, and job monotony. Sapkota et al. (2024) described cyberloafing as widespread due to the growing use of IT and smartphones post-pandemic, while Kwala and Agoyi (2024) linked the rise in cyberloafing to increased digital access, evolving work norms, and reduced supervision in hybrid setups.

Weerasooriya and Rebecca (2024) reported that their organization observed increased internet use and reduced team performance, with employees spending work hours on YouTube, Facebook, and general web browsing. Yenita and Rahmadi (2023) argued that even employees with high self-control may continue to cyberloaf due to fatigue from constant restraint, especially when company policies are vague or absent. However, not all studies indicated a high frequency of cyberloafing. For instance, Iravani et al. (2024) reported a moderate level of cyberloafing ( $M = 2.67$  on a 5-point scale), while Putrie and Lestari (2024) found average item scores between 1.56 and 2.17, suggesting low to moderate frequency. Taken together, these mixed results suggest that while cyberloafing remains prevalent in post-pandemic workplaces, its intensity and impact may vary depending on organizational culture, employee stress levels, and digital oversight.

In summary, while there is no direct statistical evidence comparing pre- and post-pandemic cyberloafing levels, the literature suggests a shift in how the behavior is described and understood. While pre-COVID studies largely characterized it as deviant or passive, during and after the pandemic, it was increasingly viewed as a response to stress, a byproduct of remote work, or even a normalized behavior. The post-Covid period reveals a mix of low to high frequency reports, indicating that cyberloafing remains a dynamic and context-dependent phenomenon in contemporary workplaces.

**Table 4.8**

*Evolution of Scholarly Perception on Cyberloafing*

<b>Time Period</b>	<b>Perception of Cyberloafing</b>	<b>Type of Cyberloafing</b>	<b>Findings</b>
Pre-Covid	Seen as deviant or passive behavior	Browsing, watching videos, shopping, reading news	Low to moderate frequency
During-Covid	Framed as coping mechanism or adaptive behavior	Entertainment, social media, disengagement during remote work	Moderate frequency; some mixed findings
Post-Covid	Increasingly normalized, dependent on organizational culture and work setting	Remote distractions, multitasking, habitual use during hybrid work	Mixed findings; varies from low to high

*Note.* This table illustrates how cyberloafing behaviors have been described across three time periods (pre-COVID, during COVID, and post-COVID) based on thematic analysis of author claims in the reviewed literature.

## Causes of Cyberloafing

Cyberloafing does not occur randomly. It often signals deeper organizational, interpersonal, or psychological challenges that manifest in the workplace. Emotional and Psychological Strain was the most frequently cited cause, appearing in 27 studies. This theme encompasses job stress, burnout, emotional exhaustion, and diminished self-regulation. For example, Hurriyati and Marlinda (2023) found a strong, significant correlation between job stress and cyberloafing, while Mishra and Tajeja (2022) reported that job stress directly predicted cyberslacking behavior. Pangani and Munyenembe (2024) similarly noted that stress and loneliness heightened cyberloafing among health workers. Other studies connected cyberloafing to increased emotional exhaustion (Harandi & Mirzaeian Khamseh, 2024), excessive workload (Aulia et al., 2024), and low self-control under stress (Sijabat, 2021). Collectively, these findings suggest that cyberloafing may serve as a maladaptive coping strategy in high-pressure environments.

Work Environment and Job Demands were also prominent, with 10 studies highlighting contextual factors such as role conflict, job design, and ambiguous policies. Bajcar and Babiak (2023) found that role conflict was positively associated with cyberloafing, while Khan et al. (2023) demonstrated that perceived overqualification predicted such behaviors. Job design emerged as another key factor, as routine and undemanding tasks were linked to increased cyberloafing (Sari et al., 2024), and job characteristics were shown to induce stress that later translated into cyberloafing (Sijabat, 2021). Additionally, organizational policies themselves contributed to the behavior. Biuki et al. (2024) identified poor perception of internet-use policies as a cause, and Werner (2020) emphasized the role of workplace norms in normalizing deviant online behavior. These findings underscore the influence of job structure and environmental ambiguity in shaping employee behavior.

Leadership and Supervision also emerged as a significant factor. In eight studies, the quality of leadership and supervisory relationships were closely tied to cyberloafing outcomes. Bibi et al. (2024) reported that despotic leadership led to deviant behaviors such as cyberloafing, especially when mediated by organizational cynicism. Fan et al. (2023) found that toxic leadership styles directly increased the likelihood of cyberloafing. Similarly, Duran and Metin-

Orta (2024) highlighted a direct positive relationship between abusive supervision and cyberloafing. Meanwhile, Yüncü and Ağtaş (2024) emphasized the buffering role of perceived organizational support in mitigating cyberloafing driven by poor leadership. These results suggest that employees may engage in cyberloafing not just out of disengagement, but as a form of withdrawal or resistance to negative managerial practices. See Table 4.9 for the most frequent causes of cyberloafing with supporting examples.

**Table 4.9**

*Thematic Summary of Commonly Reported Causes of Cyberloafing*

<b>Cause</b>	<b>Frequency (n)</b>	<b>Representative Example</b>
Emotional and Psychological Strain	27	There is a strong, significant positive correlation between job stress and cyberloafing. (Hurriyati & Marlinda, 2023); Job stress positively predicts cyberslacking (Mishra & Tageja, 2022); Higher stress and loneliness levels lead to higher cyberloafing among health workers. (Pangani & Munyenembe, 2024); Workload was identified as a cause of cyberloafing (Aulia et al., 2024); Increased cyberloafing due to emotional exhaustion (Harandi & Mirzaeian Khamseh, 2024); Work stress and low self-control significantly increase cyberloafing (Sijabat, 2021).
Work Environment and Job Demands	10	Role conflict is positively associated with cyberloafing (Bajcar & Babiak, 2023); Perceived overqualification positively predicts cyberloafing (Khan et al., 2023); Job characteristics significantly predicted work stress and cyberloafing (Sijabat, 2021); Perception of Organizational policy was identified as a cause of cyberloafing (Biuki et al., 2024); Descriptive norms were found to be the strongest predictor of cyber-loafing behaviour (Werner, 2020). Routine and undemanding tasks contribute to higher cyberloafing (Sari et al., 2024)

(continued)

**Table 4.9***Thematic Summary of Commonly Reported Causes of Cyberloafing (continued)*

<b>Cause</b>	<b>Frequency (n)</b>	<b>Representative Example</b>
Leadership and Supervision	8	Despotic leadership fosters aggressive, deviant work behavior, which results in cyberloafing and the mediating role of organizational cynicism between despotic leadership and cyberloafing (Bibi et al., 2024); Toxic leadership significantly increased cyberloafing (Fan et al., 2023); Perceived organizational support mediates the relationship between sparking leadership and cyberloafing behaviors (Yüncü & Ağtaş, 2024); Abusive supervision positively predicts employees' cyberloafing behaviors (Duran & Metin-orta, 2024).

*Note.* This table presents the three most frequently cited causes of cyberloafing based on the 267 included studies.

## **Outcomes of Cyberloafing**

The included studies examined a variety of outcomes associated with cyberloafing. These outcomes were grouped into six major themes: performance and productivity, work attitudes and engagement, emotional and psychological well-being, team dynamics, and creativity and innovation. The diversity of findings reflects both the complexity of cyberloafing as a workplace behavior and the mixed perspectives on whether its effects are detrimental, neutral, or beneficial.

Performance and productivity were the most frequently reported outcome (n = 106). Studies in this category presented mixed findings. For example, some research indicated a positive but minor effect of cyberloafing on performance (Afrizal & Yulinda, 2024), while others found no significant relationship (Bagis et al., 2023). More commonly, serious or excessive cyberloafing was linked to moderate or negative effects on job performance and productivity (Ülbeği, 2021; Rizky et al., 2024). These variations suggest that the impact of cyberloafing may depend on its intensity, purpose, or context.

Work attitudes and engagement appeared in 45 studies. Some findings indicated that job satisfaction and organizational commitment had limited influence on cyberloafing behavior (Vranceanu et al., 2022), while others found that cyberloafing could mediate the relationship between organizational factors and employee performance (Ramdani et al., 2024). Excessive cyberloafing, however, was also reported to impair focus and reduce engagement (Lim & Teo, 2024), emphasizing the importance of boundaries in discretionary internet use.

Emotional and psychological well-being outcomes were cited in 38 studies. Several authors framed cyberloafing as a coping mechanism that helps manage stress and refresh cognitive resources (Ngowella et al., 2022; Zhang et al., 2022). However, its effects were not always positive, depending on the emotional state of the employee or the organizational climate, cyberloafing could also be retaliatory or indicative of disengagement. Other studies linked it to factors such as psychological capital and experiences of abusive supervision (Agarwal & Avey, 2020).

Team dynamics was identified in 23 studies. Some findings suggest that recovery cyberloafing, when used to recharge, can improve team potency and cohesion (Koay et al., 2023). However, excessive cyberloafing was reported to contribute to team conflict and reduce overall team effectiveness (Yüncü & Ağaş, 2024). Additionally, when team members engage in frequent cyberloafing, it may negatively affect collective motivation and diminish focus on shared tasks (Zoghbi-Manrique-de-Lara, 2024).

Creativity and innovation were discussed less frequently ( $n = 7$ ), but findings were generally more positive. Sijabat (2021) found a gendered effect, with only female employees showing a significant link between cyberloafing and creativity. Batool et al. (2023) and Tiwari and Niraula (2023) argued that cyberloafing could enhance innovation and inventive behavior, especially when it involves knowledge-sharing or brief cognitive breaks during demanding work.

Security and legal risks were reported in six studies. Authors highlighted the potential for cyberloafing to introduce cybersecurity vulnerabilities, distract employees from security protocols, or lead to inappropriate use of organizational resources (Batabyal & Bhal, 2023; Syed et al., 2020). These risks were often mentioned in the context of remote or digitally dependent work environments, where monitoring may be limited and IT misuse harder to detect (Zoghbi-Manrique-de-Lara, 2024).

Overall, these findings indicate that the employee outcomes of cyberloafing are not universally negative. While high or unmanaged levels may impair performance and engagement, strategic or moderated cyberloafing can have restorative and creative benefits. Table 4.10 summarizes these themes and provides representative examples from the literature.

**Table 4.10**

*Thematic Summary of Outcomes Related to Cyberloafing*

<b>Outcomes</b>	<b>Frequency (n)</b>	<b>Representative Examples</b>
Performance and Productivity	106	Cyberloafing has a positive and significant effect on employee performance, but the influence is relatively low (Afrizal & Yulinda, 2024); Cyberloafing has no significant effect on employee performance (Bagis et al., 2023); Serious cyberloafing was correlated with job performance and productivity moderately negatively (Ülbeği, 2021); Cyberloafing negatively affects performance (Rizky et al., 2024).
Work Attitudes and Engagement	45	Cyberloafing mediates the relationship between organizational commitment and employee performance (Ramdani et al., 2024); The levels of job satisfaction and satisfaction with the organization do not have a significant influence on individual needs for cyberloafing (Vrânceanu et al., 2022); Cyberloafing may impair focus and engagement when excessive (Lim & Teo, 2024).
Emotional and Psychological Well-being	38	Cyberloafing can refresh employees and manage stress (Ngowella, et al., 2022); Cyberloafing can be retaliatory or restorative depending on emotional state (Zhang et al., 2022); Abusive supervision and psychological capital are significantly correlated with cyberloafing (Agarwal & Avey, 2020).

(continued)

**Table 4.10***Thematic Summary of Outcomes Related to Cyberloafing (continued)*

<b>Outcomes</b>	<b>Frequency (n)</b>	<b>Representative Examples</b>
Team Dynamics	23	Recovery cyberloafing significantly and positively affects team potency and team cohesion (Koay et al., 2023); Excessive cyberloafing contributes to team conflict and undermines team effectiveness (Yüncü & Ağtaş, 2024); Cyberloafing by team members negatively affects collective motivation and group task focus (Zoghbi-Manrique-de-Lara, 2024).
Creativity and Innovation	7	Only female employees showed a significant link between cyberloafing and increased creativity (Sijabat., 2021); The relationship between cyberloafing and creativity is strengthened when employees are autonomously motivated to share knowledge, and when employees have a high ability to share knowledge (Batool et al., 2023); Cyberloafing provides good impacts such as improving inventive work behavior, refreshment to employees, increases creativity and innovation at work through internet sources (Tiwari & Niraula, 2023).
Security and Legal Risks	6	Organizational risks include decreased efficiency, reduced communication, increased distraction, and potential security threats (Batabyal & Bhal, 2023); Excessive cyberloafing may lead to reduced organizational efficiency and security concerns (Syed et al., 2020); Online impacts like cybersecurity threats and IT misuse are noted but considered less frequent (Zoghbi-Manrique-de-Lara, 2024).

*Note.* This table summarizes the six most frequently reported outcomes related to cyberloafing. Each theme includes selected examples to illustrate how outcomes were expressed across the literature.

## **Organizational Responses to Cyberloafing**

The reviewed literature revealed a range of organizational responses aimed at managing cyberloafing behavior in the workplace. These strategies were thematically grouped into six categories: policy adjustments, engagement-based strategies, monitoring technologies, satisfaction and feedback mechanisms, work redesign, and leadership and communication culture. While some approaches relied on formal rules or surveillance tools, others focused on supporting employee well-being, encouraging productivity, and fostering ethical work environments. Table 4.11 presents a thematic summary of these strategies, including representative examples from the reviewed studies.

**Table 4.11**

*Thematic Summary of Organizational Responses to Cyberloafing*

<b>Organizational Strategy</b>	<b>Frequency (n)</b>	<b>Representative Examples</b>
Policy Adjustments	73	Develop clear guidelines (Ibrahim & Helaly, 2022); zero-tolerance policy on workplace ostracism (Koay & Lai, 2023); policy and reinforcement regarding internet usage (Koay et al., 2022); need for individual-level policies (Chakraborty et al., 2024).
Engagement-Based Strategies	63	Motivate secretaries to use e-learning opportunities (Hussain & Ali, 2021); Offer ethics and mindfulness training (Zhang et al., 2020); Implement emotion regulation training and coping skills programs (Zhou et al., 2022).

(continued)

**Table 4.11***Thematic Summary of Organizational Responses to Cyberloafing (continued)*

<b>Organizational Strategy</b>	<b>Frequency (n)</b>	<b>Representative Examples</b>
Monitoring Technologies	62	Monitor activities in the network and block access to certain sites (Das et al., 2020); use monitoring software and web filters with privacy balance (Chowdhury & Das, 2024); monitor the frequency of internet usage (Feisal et al., 2021).
Satisfaction and Feedback Mechanisms	57	Establish a feedback system (Peng et al., 2023); Check whether they are satisfied with their secretaries' work productivity and allow limited time allocation for cyberslacking (Hussain & Ali, 2021); Encourage beneficial smartphone use for innovation (Puenta & Price, 2021).
Work Redesign	32	Assign task variety, balanced workload, and some offline works to engage the secretaries properly (Hussain & Ali, 2021); Provide employees with autonomy, improving their self-esteem, establishing a sense of responsibility, facilitating easier access to resources, and developing trust-based relationships (Pardim et al., 2024); Implementing strategies to avoid overloading employees such as balancing task allocation, ensuring adequate resources and manpower, and providing ample breaks for mental rejuvenation (George et al., 2023)
Leadership and Communication Culture	23	Increase discipline in the company so that cyberloafing activities and behavior will be minimized to improve performance (Dmour et al., 2020); Obey the rules that apply in the company, both when working from home and in a normal situation, namely working seriously and not cyberloafing so that there is no decline in performance (Dmour et al., 2020);

(continued)

**Table 4.11**

*Thematic Summary of Organizational Responses to Cyberloafing (continued)*

Organizational Strategy	Frequency (n)	Representative Examples
		Arrange for educative and counselling sessions where organizations' expectations about ethical practices at the workplace and counter-productive behaviors are communicated (Chakraborty et al., 2024); Use a reward and punishment strategy to improve self-control and self-regulation (Ibrahim & Helaly, 2022).

*Note.* This table categorizes organizational strategies into five key themes based on coded interventions and policies across 267 studies. Frequencies indicate how many times strategies within each theme were mentioned.

Policy Adjustments were the most frequently mentioned strategy (n = 73). These included developing or revising internet use guidelines, implementing zero-tolerance policies, and tailoring regulations to individual-level behavior. Such strategies reflect a rule-based approach that emphasizes accountability and behavioral boundaries in both in-person and remote work settings.

Engagement-Based Strategies (n = 63) focused on promoting meaningful employee involvement and intrinsic motivation. These interventions included e-learning opportunities, ethics training, and mindfulness programs aimed at improving digital self-regulation and emotional resilience. This suggests a growing preference for preventive rather than punitive measures.

Monitoring Technologies (n = 62) remained a dominant but controversial tool, involving the use of software to track internet activity, block access to certain sites, or monitor usage trends. While these approaches enhance visibility into digital behaviors, they also raise concerns about privacy and trust, which are explored further in the following section on ethical implications.

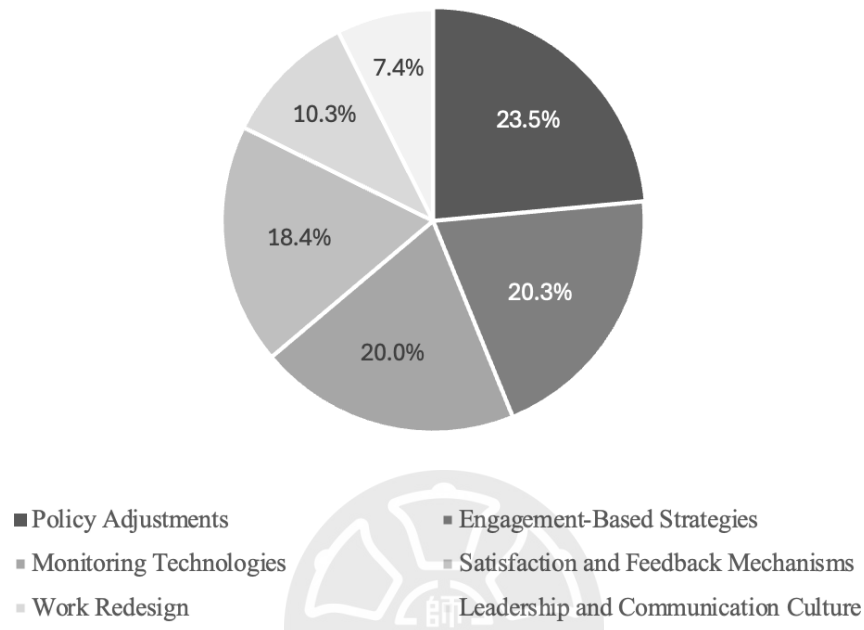
Satisfaction and Feedback Mechanisms (n = 57) centered on two-way communication between employees and management. This category included feedback systems, satisfaction checks, and discussions around acceptable digital use. The goal of these strategies was to align employee needs with organizational expectations, creating space for controlled cyberloafing when beneficial.

Work Redesign (n = 32) involved structuring roles to reduce monotony and enhance autonomy. Strategies included adjusting workload, introducing task variety, and emphasizing job fit to reduce idle time. These initiatives aimed to tackle the root causes of cyberloafing—such as boredom or burnout—by creating more engaging work environments.

Leadership and Communication Culture (n = 23) focused on setting behavioral expectations through education, transparency, and modeling ethical conduct. Interventions ranged from formal counseling and training sessions to promoting a culture of discipline and accountability. Although less frequently mentioned, these strategies emphasize the long-term shaping of workplace norms. To visualize the relative emphasis on each strategy, Figure 4.2 presents the frequency distribution of these organizational responses.

**Figure 4.2**

*Distribution of Organizational Strategies for Managing Cyberloafing*



*Note:* This pie chart illustrates the frequency distribution of six organizational strategies identified across the 267 reviewed studies. Percentages are based on a total of 310 strategy mentions coded from interventions and policies.

In summary, organizations have responded to cyberloafing through a combination of policy enforcement, technological monitoring, employee engagement, and workplace restructuring. While some strategies emphasize control and compliance, others prioritize motivation, satisfaction, and communication. The diversity of these approaches reflects the complex nature of cyberloafing and suggests that no single intervention is universally effective. Instead, a multi-faceted approach that balances structure with support may be more successful in addressing this evolving workplace behavior.

## **Ethical and Future Considerations**

This section addresses the third research question by examining the ethical implications of electronic performance monitoring (EPM) in relation to cyberloafing. It also summarizes future research directions identified across the reviewed studies, highlighting key gaps and recommendations for advancing the field.

### **Ethical Implications of EPM**

Although it was anticipated that many studies would address employee perspectives on electronic performance monitoring (EPM), relatively few offered in-depth empirical findings on this topic. Instead, the literature primarily presented conceptual concerns, practical recommendations, or indirect implications drawn from broader discussions on digital surveillance. The ethical considerations were categorized into five themes: privacy concerns, trust and autonomy, psychological impact, fairness and transparency, and alternatives to monitoring.

Privacy concerns were among the most frequently mentioned ethical issues. Several studies indicated that computer-based monitoring increases employees' perception of privacy invasion (Luo et al., 2022; Salami, 2024). Employees often feel uncomfortable when they realize their personal or usage data is being collected, especially when they lack control over how that information is used (Jiang et al., 2024). These findings highlight the tension between performance oversight and personal boundaries in digital workspaces.

Trust and autonomy were also commonly discussed. Excessive or strict monitoring was found to reduce perceptions of autonomy, increase feelings of injustice, and lower organizational trust and morale (Alharthi et al., 2021; Fan et al., 2023; Song et al., 2021). These reactions suggest that while EPM may be intended to deter cyberloafing, it can paradoxically damage the social contract between employer and employee when implemented without sensitivity.

The psychological impact of monitoring was emphasized in several studies. Over-monitoring was associated with emotional exhaustion, stress, and reduced morale, especially when employees felt they were being constantly watched (Fan et al., 2023; Wong et al., 2020). In

some cases, monitoring may even suppress cyberloafing as a useful coping mechanism, thereby limiting employees' ability to recover from work demands.

Fairness and transparency emerged as key ethical principles in designing and implementing EPM systems. Several authors recommended clear communication of monitoring policies, the use of anonymized data, and efforts to build awareness around digital accountability (Aciksoz et al., 2024; Luna, 2024). Tandon et al. (2022) emphasized the need for research-driven policy frameworks that avoid adverse outcomes while balancing organizational needs with ethical concerns.

Finally, some studies proposed alternatives to monitoring. Rather than focusing solely on surveillance, scholars suggested addressing the root causes of cyberloafing, such as role ambiguity, workload imbalance, or abusive supervision (Hsuna et al., 2022; Liu & Wu, 2023). These interventions promote a more developmental approach, emphasizing managerial clarity and employee support over digital oversight.

Overall, while ethical discussions surrounding EPM were present in the literature, they were not always supported by empirical data. The findings suggest that ethical concerns must be considered when designing workplace monitoring systems. Table 4.12 summarizes the thematic implications and representative examples from the included studies.

**Table 4.12**

*Emergent Ethical Themes Related to EPM*

<b>Ethical Implications</b>	<b>Representative Examples</b>
Privacy Concerns	Individuals become concerned about information privacy when they are aware that their information is collected by others but do not have control over the collection, possible usage, and dissemination of their information (Jiang et al., 2024); Computer monitoring increases employees' perception of privacy invasion (Luo et al., 2022); Monitoring perceived as invasion of privacy (Salami, 2024).

(continued)

**Table 4.12***Emergent Ethical Themes Related to EPM (continued)*

<b>Ethical Implications</b>	<b>Representative Examples</b>
Trust and Autonomy	Extreme monitoring may reduce trust (Fan et al., 2023); Over-monitoring may reduce autonomy (Song et al., 2021); Strict monitoring may backfire by creating perceptions of injustice (Spath & Vengrouskie, 2022); Excessive countermeasures such as constant monitoring can lower trust and moral (Alharthi et al., 2021).
Psychological Impact	Policies on monitoring should be balanced and avoid emotional exhaustion triggers (Fan et al., 2023); Monitoring can lower trust and morale (Alharthi et al., 2021); Over-monitoring cyberloafing could prevent employees from using it as a coping mechanism (Wong et al., 2020).
Fairness and Transparency	Recommends transparency and anonymization (Luna, 2024); Monitoring should be balanced with awareness-building and fairness (Aciksoz et al., 2024); More research on the design of monitoring policies that avoid negative consequences (Tandon et al., 2022).
Alternatives to Monitoring	Suggested that monitoring is necessary when excessive internet use not related to work occurs, but emphasis is on managing workload and role clarity (Hsuna et al., 2022); Instead of over-monitoring, it is recommended to reduce abusive supervision to prevent cyberloafing (Liu & Wu, 2023); Emphasized addressing role ambiguity and role conflict directly rather than increasing surveillance to prevent cyberloafing (Cahyaningrum & Projo, 2021).

*Note.* This table reflects ethical concerns discussed in studies indirectly or briefly. Few articles directly investigated the ethical implications of EPM, highlighting a gap in the literature.

## Future Research Directions

The included studies offered several suggestions for advancing research on cyberloafing. These directions were thematically categorized into five main areas: sampling and contextual scope, new variables and theoretical models, longitudinal and experimental designs, cross-cultural and industry comparisons, and outcomes and consequences. Together, these themes highlight ongoing gaps in the literature and suggest promising avenues for future investigation.

Sampling and contextual scope was the most frequently recommended direction ( $n = 64$ ). Authors emphasized the need to expand samples beyond specific occupational groups or industries. For example, Hussain and Ali (2021) suggested including students, teachers, and non-managerial staff, while Mkhize et al. (2024) and Puente and Price (2021) encouraged exploring other sectors and departmental contexts. Others recommended using new sampling techniques (Akar et al., 2020) or replicating studies with different populations to enhance generalizability (Hu et al., 2023).

New variables and theoretical models were also emphasized ( $n = 37$ ). Several authors encouraged the use of alternative frameworks—such as rational choice theory and the theory of interpersonal behavior—to explain cyberloafing more holistically (Osei et al., 2022; Puente & Price, 2021). There were also calls to test additional mediators and moderators like job satisfaction, emotional labor, or organizational citizenship behavior (Aftab & Waseem, 2021; Khan et al., 2021). These suggestions reflect a growing interest in unpacking the complex mechanisms that influence cyberloafing behavior.

Longitudinal and experimental designs ( $n = 36$ ) were identified as underused but important for establishing causality. Researchers called for multi-wave studies (Koay & Lai, 2023), controlled experiments (Zhu & Zhao, 2024), and the integration of diverse designs to better understand how cyberloafing evolves over time or in response to workplace changes (Kwala & Agoyi, 2024).

Cross-cultural and industry comparisons ( $n = 35$ ) were also highlighted. Authors recommended examining how cyberloafing manifests across different national, organizational, or industrial settings. For instance, studies proposed comparing academic and corporate environments (Hussain & Ali, 2021) or exploring sectoral differences between public and private

institutions (Munawar et al., 2023). These suggestions aim to test the universality of cyberloafing models and improve cultural sensitivity in future research.

Finally, outcomes and consequences were identified in 15 studies. Researchers encouraged investigating the long-term effects of cyberloafing on productivity (Zubairi et al., 2024), its relationship with workplace mistreatment (Koay et al., 2022), and broader performance-related consequences (Dooly, 2021). El Aleem et al. (2024) also proposed exploring the organizational factors that contribute to cyberloafing in connection with ostracism and discrimination.

In summary, the future directions proposed across the reviewed studies reflect both theoretical and methodological gaps in the current literature. Addressing these areas may lead to a more comprehensive and contextually grounded understanding of cyberloafing in today’s workplace. Table 4.13 provides a thematic overview of these research recommendations and their supporting sources.

**Table 4.13**

*Thematic Summary of Future Research Directions on Cyberloafing*

<b>Future Research Direction</b>	<b>Frequency (n)</b>	<b>Representative Examples</b>
Sampling and Contextual Scope	64	Expand sample to students, teachers, and other staff (Hussain & Ali, 2021); Investigate other personnel to obtain additional insight into cyberloafing benefits (Puente & Price, 2021); Use other departments and sectors (Mkhize et al., 2024); Use different sampling techniques (Akar et al., 2020); Replicate this study using different samples from regions (Hu et al., 2023).
New Variable and Theoretical Models	37	Explore the relationships among the variables in this study by using other theories to assess how significant others influence employees’ behaviour at work (Osei et al., 2022);

(continued)

**Table 4.13***Thematic Summary of Future Research Directions on Cyberloafing (continued)*

<b>Future Research Direction</b>	<b>Frequency (n)</b>	<b>Representative Examples</b>
Longitudinal and Experimental Designs	36	<p>Include moderating variables such as job satisfaction, organizational citizenship behavior, and workplace spirituality (Khan et al., 2021); Investigate cyberloafing using other theories to frame this study such as the rational choice theory and the theory of interpersonal behavior (Puente &amp; Price, 2021); Introduce other mediators like distributive justice or emotional labor into the model (Aftab &amp; Waseem).</p> <p>Apply diverse research designs, such as longitudinal studies or experiments (Kwala &amp; Agoyi, 2024); Consider using a multi-wave longitudinal design for data collection (Koay &amp; Lai, 2023); Conduct an experimental design to yield a causal relationship between the variables (Zhu &amp; Zhao, 2024).</p>
Cross-Cultural and Industry Comparisons	35	<p>Compare and analyze the findings to other industries against those in the oil industry (Harandi &amp; Mirzaeian Khamseh, 2024); Systematically study the effects of cyberslacking to compare the phenomena in the Ethiopian academic setting (Hussain &amp; Ali, 2021); Research other industries for generalization purposes (Puente &amp; Price, 2021); Compare public and private sector hospitals (Munawar et al., 2023).</p>
Outcomes and Consequences	15	<p>Explore the impact of other workplace mistreatments such as workplace discrimination, ostracism, and bullying on cyberloafing (Koay et al., 2022); Investigate the long-term effects of cyberloafing on work performance (Zubairi et al., 2024);</p>

(continued)

**Table 4.13**

*Thematic Summary of Future Research Directions on Cyberloafing (continued)*

<b>Future Research Direction</b>	<b>Frequency (n)</b>	<b>Representative Examples</b>
		Research performance or work productivity as a mechanism to monitor cyberloafing (Dooly, 2021); Investigate broader organizational and individual factors contributing to workplace ostracism and cyber loafing (El Aleem et al., 2024).

*Note.* This table summarizes thematic directions for future research as identified across the included studies on cyberloafing. Frequencies represent the number of suggestions coded under each theme.

## **Summary and Framework of Cyberloafing Relationships**

### **Summary of Key Findings**

This chapter synthesized findings from 267 studies on cyberloafing in workplace settings, offering insights into its evolving definitions, patterns of behavior, organizational responses, and ethical considerations. The analysis revealed that cyberloafing has transitioned from being seen solely as a form of workplace deviance to a more nuanced behavior influenced by stress, autonomy, and contemporary work environments especially in the post-pandemic era. While pre-pandemic studies emphasized passive or deviant behavior, post-pandemic literature described cyberloafing as increasingly normalized and shaped by remote or hybrid work settings.

In examining the causes of cyberloafing, three key themes emerged from the included studies. First, emotional and psychological strain, particularly job stress, burnout, and emotional exhaustion, was the most frequently cited cause. Cyberloafing often served as a coping mechanism for overwhelmed or fatigued employees. Second, work environment and job demand contributed significantly to cyberloafing when role conflict, monotonous tasks, and ambiguous internet policies were present. Finally, poor leadership and supervision, especially toxic or

abusive behaviors, also triggered cyberloafing, sometimes as a form of passive resistance or disengagement. These findings suggest that cyberloafing may signal deeper organizational and emotional issues rather than simple employee misconduct.

The outcomes of cyberloafing were multifaceted and grouped into six thematic categories: performance and productivity, work attitudes and engagement, emotional and psychological well-being, team dynamics, creativity and innovation, and security and legal risks. While many studies found cyberloafing to negatively impact job performance and employee engagement, others pointed to its restorative effects on stress and its potential to boost creativity. Importantly, the effect of cyberloafing appeared highly dependent on its frequency, context, and purpose which highlights that moderate cyberloafing may serve useful functions, whereas excessive or unmanaged usage tends to impair performance, cohesion, and security.

The review also revealed a wide range of organizational responses to cyberloafing, categorized into six primary strategies: policy adjustments, monitoring technologies, engagement-based programs, satisfaction and feedback mechanisms, work redesign, and leadership and communication culture. While some strategies emphasized compliance and surveillance, such as monitoring tools and internet usage policies, others focused on improving employee motivation, providing emotional support, and cultivating ethical work cultures. The frequency of these strategies varied, with policy-based approaches being most common, yet engagement-oriented and feedback-driven initiatives also gaining traction as more human-centered responses to cyberloafing.

Ethical concerns related to electronic performance monitoring (EPM) emerged across several themes, including privacy, autonomy, and fairness. While many studies raised conceptual concerns, few directly addressed ethical issues through empirical research which highlighted a gap in the literature. Lastly, the review identified a strong call for future research to expand sampling, apply new theoretical models, adopt longitudinal designs, and examine cyberloafing across cultures and industries.

Together, these findings illustrate the multidimensional nature of cyberloafing in contemporary workplaces and point toward the need for balanced, evidence-informed strategies that account for both individual and organizational dynamics.

## **Comprehensive Framework**

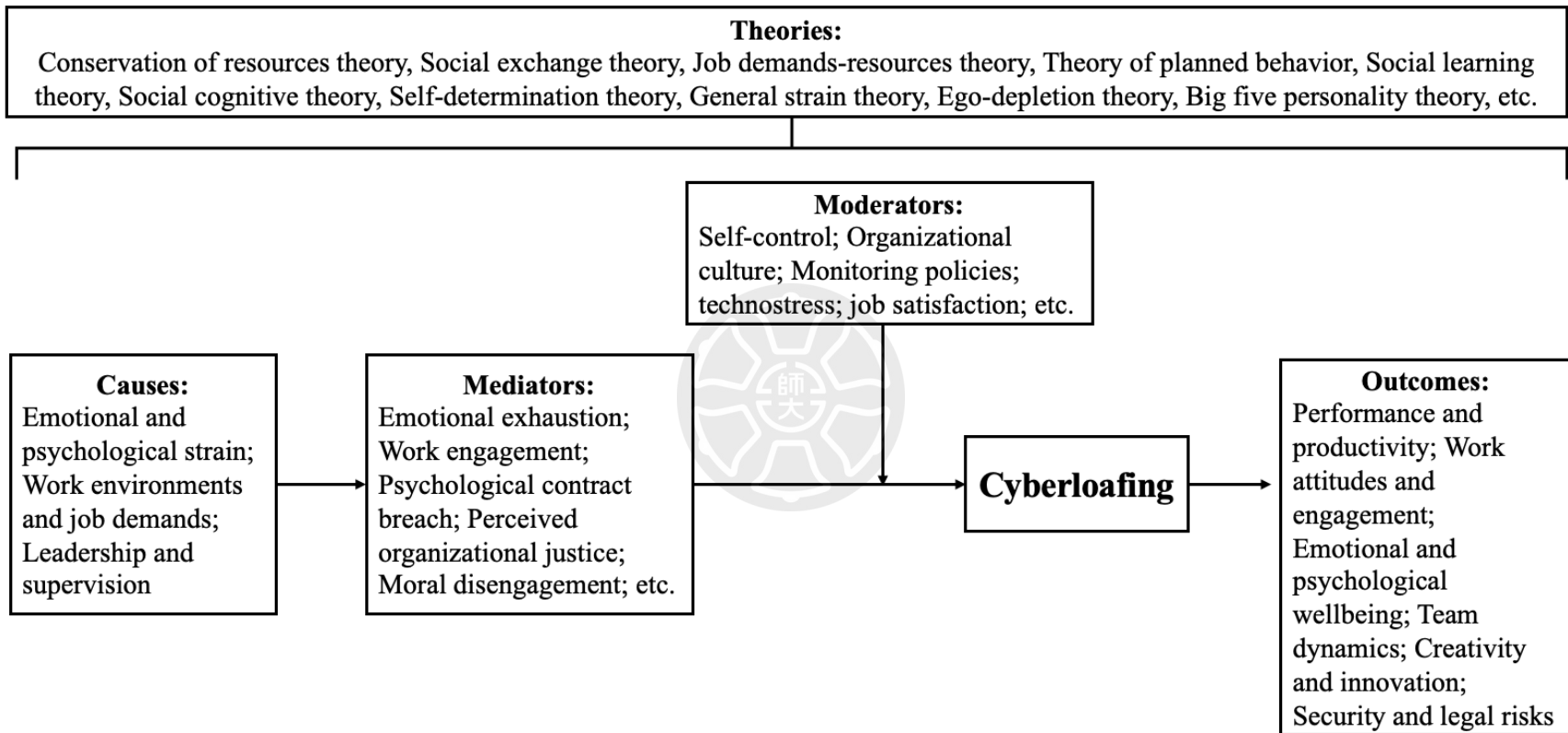
Drawing from the findings of this systematic review, a comprehensive framework is proposed to synthesize the current understanding of cyberloafing in the workplace. At the center of the framework is cyberloafing, which is shaped by a range of causes, mediated and moderated by key psychological and organizational variables, and linked to diverse outcomes. Additionally, the framework highlights strategic organizational responses aimed at managing cyberloafing constructively.

The causes of cyberloafing are grouped around three major themes: (1) emotional and psychological strain (e.g., stress, burnout), (2) work environments and job demands (e.g., workload, job autonomy), and (3) leadership and supervision practices. These drivers may lead to cyberloafing directly or indirectly through key mediators such as emotional exhaustion, reduced work engagement, psychological contract breach, perceived organizational justice, and moral disengagement. The relationship between these factors and cyberloafing is further shaped by moderators such as self-control, organizational culture, technostress, job satisfaction, and monitoring policies. These variables influence the strength and direction of the relationships by either amplifying or mitigating the likelihood of cyberloafing. The outcomes of cyberloafing span multiple levels, including individual performance and productivity, employee engagement, emotional wellbeing, team dynamics, innovation, and even legal or cybersecurity risks.

This integrated framework captures the multifaceted nature of cyberloafing, offering a comprehensive perspective on how it emerges, operates, and can be managed in modern workplaces. See Figure 4.3.

**Figure 4.3**

*Comprehensive Framework of Cyberloafing*



## CHAPTER V CONCLUSIONS & RECOMMENDATIONS

This chapter begins by offering a reflective conclusion on what the study has accomplished, followed by a discussion of its contributions to both workplace practice and academic research. The chapter then acknowledges key limitations of the study and concludes with recommendations for future research that can further build on and refine the insights gained from this systematic literature review.

### Conclusions

This systematic literature review set out to explore how cyberloafing is defined and understood, how organizations respond to it, and what ethical concerns emerge in response to monitoring practices in the workplace. The study addressed three research questions and synthesized findings from 267 articles published between 2020 and 2024.

The review found that cyberloafing is increasingly understood as a multidimensional behavior rather than a purely deviant act. While earlier studies framed it primarily as counterproductive work behavior (Askew et al., 2014; Lim, 2002), more recent literature acknowledges its adaptive functions, including stress relief, psychological detachment, and cognitive recovery (Wu et al., 2020; Zhang et al., 2022). This shift is particularly relevant in remote and hybrid work environments where boundaries between work and personal life are less defined (Koay & Soh, 2020). Despite this evolution, there is no consensus in the literature regarding its definition. Researchers use terms such as cyberslacking, non-work-related internet use, and internet abuse interchangeably, often without clearly distinguishing between occasional restorative breaks and habitual disengagement (Alharthi et al., 2019; Batabyal & Bhal, 2020).

The review also identified three primary categories of organizational response: monitoring and surveillance, engagement-based strategies, and policy enforcement. Electronic performance monitoring (EPM) remains one of the most common interventions, aimed at reducing misuse of digital resources (Fan et al., 2023; Stanton, 2000). However, its effectiveness is debated, particularly due to negative psychological outcomes such as stress, reduced morale, and diminished trust (Jiang et al., 2024; Spath & Vengrouskie, 2022). In contrast, engagement-based strategies, such as job redesign, mindfulness programs, and wellness initiatives, have

shown greater potential in addressing the root causes of cyberloafing by enhancing employee motivation and well-being (George et al., 2023; Zhang et al., 2020; Zhou et al., 2022).

Ethical concerns related to cyberloafing interventions, particularly EPM, emerged consistently across the literature. The most common issues involved employee privacy, consent, autonomy, and fairness (Alharthi et al., 2021; Song et al., 2021). Monitoring practices were often implemented without adequate communication or justification, leading to perceptions of injustice and distrust (Fan et al., 2023; Luna, 2024). Although many articles acknowledged these ethical tensions, few directly studied employees lived experiences or psychological responses to being monitored (Jiang et al., 2024; Spath & Vengrouskie, 2022). The absence of employee voice in the literature represents a critical gap, especially as organizations increasingly adopt online tools to track behavior.

### **Research Implications**

This study offers several research implications that contribute to the academic understanding of cyberloafing while also revealing important gaps in the literature. These implications go beyond restating the findings and instead highlight how this review advances theory, identifies areas for improvement in methodology, and points to new directions for future research.

This study reinforces the need to revisit how cyberloafing is conceptualized in organizational research. Although existing theories such as the Conservation of Resources Theory, Theory of Planned Behavior, and Job Demands–Resources Model have been applied to explain cyberloafing (Wu et al., 2023; Zhang et al., 2020), few studies have adapted these frameworks to reflect today’s remote and hybrid work environments. The dual framing of cyberloafing as both a counterproductive act and a coping mechanism (Koay & Soh, 2020; Zhang et al., 2022) challenges the assumption that it is inherently deviant. These findings call for new or updated models that account for blurred work-life boundaries, task autonomy, and restorative behaviors. Future theoretical development must also integrate ethical dimensions of monitoring, which are often omitted in traditional models.

Another implication is the need for greater attention to employee perspectives in research on electronic performance monitoring. Although EPM is widely discussed as a solution to managing cyberloafing (Fan et al., 2023; Stanton, 2000), few studies directly examine how

employees experience or interpret monitoring practices. This lack of voice limits our understanding of how surveillance affects trust, psychological safety, and perceptions of organizational justice (Jiang et al., 2024; Spath & Vengrouskie, 2022). Future research should therefore incorporate qualitative methods such as interviews, focus groups, or diary studies to better understand the lived experiences of workers in digitally monitored environments. These perspectives are essential not only for theory development but also for informing ethical guidelines for the implementation of monitoring technologies.

Methodological limitations were another consistent theme in the reviewed studies. Most research relied heavily on cross-sectional self-report surveys, which restrict the ability to establish causality or observe behavioral changes over time (Koay & Soh, 2020; Zhu & Zhao, 2024). The field would benefit from more longitudinal designs, experimental studies, and mixed-methods research that can capture the dynamic nature of cyberloafing and its interaction with evolving workplace structures. For example, few studies have examined how cyberloafing patterns shift before and after the introduction of flexible work policies or EPM tools. Using diverse methodological approaches would provide a more robust and contextualized understanding of cyberloafing.

This review also revealed a conceptual inconsistency in how cyberloafing is defined and measured across studies. Various terms such as cyberslacking, internet misuse, and non-work-related computing were used interchangeably, often without theoretical justification or clear distinctions (Alharthi et al., 2019; Batabyal & Bhal, 2020). Such inconsistency makes it difficult to compare findings across studies and hinders theoretical clarity. Future research should work toward standardizing definitions and classification systems that reflect both the intent behind and the impact of cyberloafing behavior. A consistent and context-sensitive definition is particularly important in remote and hybrid work environments where digital autonomy is high.

Perhaps one of the most significant findings of this review is the limited attention given to organizational-level outcomes of cyberloafing. While many studies explored individual consequences such as performance, engagement, or stress (Aghaz & Sheikh, 2016; Zhang et al., 2022), very few investigated how cyberloafing impacts broader organizational variables. The few that did focused narrowly on security risks or legal compliance (Batabyal & Bhal, 2020; Sipior & Ward, 2002). This suggests a critical oversight in the literature, given that

organizational policies are often justified on the assumption that cyberloafing harms overall productivity, culture, or team cohesion. Future research should examine how aggregated cyberloafing behaviors influence firm-level outcomes, including innovation, customer service quality, and organizational trust.

Finally, the review highlights a lack of diversity in the geographical and occupational contexts represented in the literature. Most studies were conducted in Asian countries and within corporate or office-based settings. This narrow focus limits the generalizability of the findings. Cyberloafing may be understood and managed differently across cultural and economic contexts, and among gig workers, public sector employees, or freelance professionals. Future studies should broaden their scope to include a wider variety of work environments and populations, thereby improving the applicability and relevance of cyberloafing research across global and sectoral contexts.

### **Practical Implications**

This study offers several practical implications for key workplace stakeholders, highlighting how insights from recent cyberloafing research can inform real-world decisions, improve work practices, and promote ethical work environments. These implications are grounded in the findings of this review and reflect a shift toward more balanced, proactive, and context-sensitive approaches to managing employee internet use.

For employees, the findings encourage greater self-awareness regarding internet use at work. Occasional internet breaks may serve as a useful coping strategy, helping to reduce cognitive fatigue and maintain focus. However, when internet use becomes excessive or habitual, it may signal deeper issues such as job dissatisfaction, disengagement, or burnout (Zhang et al., 2022). Employees can use this awareness to reflect on their work habits and evaluate whether cyberloafing is serving as a helpful pause or an unhealthy form of avoidance. Participation in well-being programs, internet literacy workshops, and open discussions with supervisors about workload challenges can empower employees to manage stress in constructive ways. In contexts where flexible work arrangements are in place, employees may also benefit from co-creating team norms around acceptable internet use, allowing them to align personal needs with organizational expectations.

For supervisors, this study highlights the critical role of relational leadership in shaping online behavior and online boundaries. Managers are uniquely positioned to model healthy online habits, normalize appropriate break-taking, and encourage open communication about workloads and stress levels (Koay, 2018; Pindek et al., 2018). Instead of relying solely on punitive feedback for cyberloafing, supervisors can initiate team check-ins that explore the root causes of disengagement and collaboratively identify solutions. They can also work with employees to co-design flexible work plans that incorporate brief, scheduled online breaks, thus transforming cyberloafing from a reactive behavior into a proactive wellness strategy. When managers adopt a coaching-oriented approach, they create a psychologically safe environment that reduces covert cyberloafing and builds trust.

For HR professionals, the findings support a shift away from monitoring and discipline toward preventive and supportive strategies. Cyberloafing is often symptomatic of broader organizational issues such as poor job design, excessive workloads, or unclear expectations. As such, HR practitioners can use these findings to advocate for policies that address root causes. Implementing mindfulness programs, job enrichment strategies, and employee recognition systems can help reduce the stressors that trigger disengagement (George et al., 2023; Zhou et al., 2022). Furthermore, HR departments should regularly review and revise internet use policies to ensure they are fair, flexible, and reflective of current work realities. Rather than banning all non-work-related internet activity, policies should clarify acceptable behaviors and provide room for brief restorative use. Transparent policy communication and employee training on internet responsibility can foster ethical online conduct without creating a climate of fear or resentment (Alharthi et al., 2021).

For executives and senior leaders, the review offers critical insights into the unintended consequences of over-reliance on electronic performance monitoring. While EPM may reduce visible cyberloafing, it can also damage employee morale, increase stress, and undermine trust if implemented without transparency and consent (Fan et al., 2023; Luna, 2024). Leaders must recognize that the effectiveness of monitoring tools is closely tied to how they are perceived by employees. To avoid backlash and disengagement, executives should prioritize ethical implementation practices, such as informing employees of monitoring purposes, setting clear boundaries, and involving staff in monitoring decisions (Song et al., 2021). More broadly, senior

leaders should champion a values-based culture that promotes autonomy, accountability, and wellness, ensuring that online tools are used to support, not control, employee performance.

At the organizational level, cyberloafing should be addressed as part of a larger conversation about digital well-being, ethical leadership, and sustainable work cultures. The findings suggest that trust-based environments are more effective than high-surveillance workplaces in managing internet use. Organizations should therefore focus on cultivating an ethical culture that balances performance goals with employee well-being (Puente & Price, 2021). This may involve investing in leadership development programs, integrating wellness metrics into performance evaluations, and designing jobs that provide autonomy and meaning. Additionally, organizations should adopt adaptive, evidence-informed internet use policies that reflect diverse work styles, technological access, and employee needs. In doing so, they can reduce harmful forms of cyberloafing while still supporting internet recovery behaviors that enhance resilience and creativity.

### **Limitations**

Despite its contributions, this study has several limitations. First, the review was limited to articles published between 2020 and 2024 to capture pre- and post-pandemic trends. While this time frame ensured relevance to the contemporary workplace, it excluded earlier foundational studies that may have provided valuable historical context or comparative insights.

Second, although the coding framework was systematically developed and applied, the coding process was conducted by a single researcher. The absence of a second coder introduces the risk of subjective interpretation and potential bias in data extraction and thematic classification. Having multiple coders would have enhanced inter-coder reliability and strengthened the credibility of the findings (Elo & Kyngäs, 2008; Merriam, 2009).

Third, many of the included articles lacked methodological transparency, particularly in reporting sample collection periods, geographic settings, and theoretical frameworks. This limited the depth of comparative analysis. In addition, this variability in reporting may have affected the consistency and comparability of coded variables across studies.

Fourth, the review included only English-language publications. As a result, research published in other languages or from underrepresented regions may have been overlooked, possibly introducing language and cultural bias into the findings.

Fifth, this study had a constrained use of keywords during the literature search phase. Specifically, only the terms cyberloafing and cyberslacking were used to identify relevant studies. While these are the most recognized terms in the academic literature, other related concepts such as non-work-related internet use or workplace internet leisure browsing may also capture aspects of cyberloafing behavior. These additional terms were excluded due to the already large volume of articles retrieved with the two primary keywords, which made the screening process more manageable within the time constraints of this thesis.

Finally, the study was based solely on secondary data from published literature. Although thematic synthesis provided valuable insights, the absence of primary data collection means that causal claims could not be made, and the study is limited in its ability to capture lived experiences or evolving trends in real time.

### **Suggestions for Future Study**

While this study provided a comprehensive synthesis of cyberloafing research from 2020 to 2024, several opportunities exist to build on and improve the current work. This SLR deliberately focused on literature published between 2020 and 2024 to complement an existing SLR that covered studies up to 2019. Future research should extend the review timeline beyond 2024 to assess how cyberloafing continues to evolve in response to emerging work trends such as AI-driven monitoring, return-to-office mandates, or the normalization of hybrid roles. A rolling or updated SLR approach could help track these dynamic shifts over time.

In addition to expanding the timeframe, future studies should also address methodological limitations. The current study used a single-coder approach, which, although consistent, limits the ability to verify the reliability of coding decisions. Future studies should consider involving multiple coders and establishing inter-coder agreement protocols to enhance the objectivity and credibility of the analysis. This would improve the transparency and reproducibility of the findings.

Another area for improvement lies in the choice of keywords used during the literature search. Future research should consider expanding the range of keywords such as on-work-related computing, internet leisure browsing, or personal web use. Incorporating a broader set of search terms could uncover a more diverse body of literature, reveal overlooked patterns, and offer a more comprehensive understanding of how cyberloafing behavior is conceptualized across

fields. As research on cyberloafing behavior at work continues to evolve, future SLRs should explore the inclusion of these alternative terms while also establishing clear definitions and boundaries for what constitutes cyberloafing.

Moreover, while this SLR employed thematic analysis, future research could incorporate meta-analytic techniques to statistically assess effect sizes and correlations between cyberloafing and key variables such as job stress, engagement, and performance. This would allow for more definitive conclusions about the strength and direction of relationships across studies.

Building on the coding scheme used in this study, future research could also refine certain variables such as intervention types, organizational roles, or monitoring mechanisms, and include new ones such as leadership style, internet policy transparency, or organizational justice perceptions. Expanding the coding matrix could lead to the discovery of subtler patterns or underexplored associations within the cyberloafing literature.

Furthermore, this review revealed limited empirical focus on how employees themselves perceive cyberloafing and monitoring. Future studies could prioritize qualitative designs to capture employees lived experiences, ethical concerns, and coping strategies under different work arrangements and surveillance conditions.

Finally, several new avenues for inquiry emerged during this review. For example:

- Under what conditions does cyberloafing function as a resource recovery mechanism versus a performance detractor?
- How do employees in hybrid roles navigate blurred boundaries between acceptable and unacceptable cyberloafing?
- What organizational cultures are more tolerant or supportive of controlled personal internet use at work?

These questions warrant primary empirical investigation, especially through mixed methods designs that can capture both behavioral patterns and contextual nuance.

## REFERENCES

- Aalbers, G., Vanden Abeele, M. M. P., Hendrickson, A. T., de Marez, L., & Keijsers, L. (2022). Caught in the moment: Are there person-specific associations between momentary procrastination and passively measured smartphone use? *Mobile Media & Communication*, 10(1), 115–135. <https://doi.org/10.1177/2050157921993896>
- \*Abd Elaleem, M. B. (2024). *The Effect of cyber loafing on the relationship between Workplace Ostracism and Organizational Citizenship Behavior: An Empirical study on Private Universities in Egypt* [PhD Thesis, Faculty of commerce Benha University] [https://www.bu.edu.eg/portal/uploads/Commerce/Management/1610/publications/Noran%20Abd%20Elrahman%20Elsaid%20Abd%20Elwahab\\_research%20noran.pdf](https://www.bu.edu.eg/portal/uploads/Commerce/Management/1610/publications/Noran%20Abd%20Elrahman%20Elsaid%20Abd%20Elwahab_research%20noran.pdf)
- \*Abro, S., Phulpoto, N. H., Memon, S., & Brohi, M. A. (2021). Influence of Personality Traits on Cyberloafing in the Service Sector of Pakistan. *Journal of Entrepreneurship, Management, and Innovation*, 3(2), 262–283.
- \*Aciksoz, S., Sendir, M., Atar, N. Y., Simsekoglu, N., & Baydili, K. N. (2023). *Is Cyberloafing an Indicator of Innovativeness?* <https://www.researchsquare.com/article/rs-2805290/latest>
- \*Aciksoz, S., Sendir, M., Atar, N. Y., Simsekoglu, N., & Baydili, K. N. (2024). Exploring the relationship between cyberloafing and innovativeness among nurses in research hospitals: A cross-sectional study in Turkey. *BMC Nursing*, 23(1). Scopus. <https://doi.org/10.1186/s12912-024-02008-6>
- \*Adams Ogirima, O., Jamiu Temitope, S., & Joy Tolulope, J. (2020). Assessment of cyberloafing, job satisfaction and job productivity of National Youth Service Corps members in Bayelsa State, Nigeria. *Open Journal for Psychological Research*, 4(1).
- \*Adeniyi, S. L. (2024). Impact of cyberloafing on the workplace (A case of Zenith Bank Nigeria Plc.). *International Journal of Advances in Engineering and Management (IJAEM)*, 6(01), 634–650.
- \*Afrizal, R. M., & Yulinda, A. T. (2024). Analysis of cyberloafing and work-life balance on the performance of employees in the State Wealth and Auction Service Office in Bengkulu City. *Bengkulu International Conference on Economics, Management, Business and Accounting (BICEMBA)*, 2, 1277–1290. <https://conference.unib.ac.id/index.php/BICEMBA/article/download/171/113>

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References marked with an asterisk (\*) indicate studies that were included in the systematic literature review.

- \*Aftab, K., & Waseem, S. N. (2023). The alienated employee: The role of cyberloafing in coping with workplace incivility in manufacturing sector of Pakistan. *International Journal of Health Sciences*, 7(S1), 2250–2271. <https://doi.org/10.53730/ijhs.v7nS1.14456>
- \*Agarwal, U. A., & Avey, J. B. (2020). Abusive supervisors and employees who cyberloaf: Examining the roles of psychological capital and contract breach. *Internet Research*, 30(3), 789–809. <https://doi.org/10.1108/INTR-05-2019-0208>
- Aghaz, A., & Sheikh, A. (2016). Cyberloafing and job burnout: An investigation in the knowledge-intensive sector. *Computers in Human Behavior*, 62, 51–60. <https://doi.org/10.1016/j.chb.2016.03.069>
- \*Aiello, J. R., & Kolb, K. J. (1995). Electronic performance monitoring and social context: Impact on productivity and stress. *Journal of Applied Psychology*, 80(3).
- Aiello, J. R., & Shao, Y. (1993). Electronic performance monitoring and stress: The role of feedback and goal setting. In M. J. Smith & G. Salvendy (Eds.), *Human-computer interaction: Applications and case studies* (pp. 1011–1016). Amsterdam: Elsevier Science.
- \*Akar, I., & Karabulut Coskun, B. (2020). Exploring the relationship between creativity and cyberloafing of prospective teachers. *Thinking Skills and Creativity*, 38, 100724. <https://doi.org/10.1016/j.tsc.2020.100724>
- \*Aksakal, N. Y. (2023). Investigation of cyberloafing behavior in terms of various elements: A qualitative study. *Research Journal of Business and Management*, 10(4), 174–186.
- \*Aladwan, M. A., Muala, I. A., & Salleh, H. S. (2021). Cyberloafing as a mediating variable in the relationship between workload and organizational commitment. *Management Science Letters*, 11(4), 1013–1022.
- Alharthi, S., Levy, Y., Wang, L., & Hur, I. (2019). Employees' mobile cyberslacking and their commitment to the organization. *Journal of Computer Information Systems*, 61(2), 141–153. <https://doi.org/10.1080/08874417.2019.1571455>
- \*Alharthi, S., Levy, Y., Wang, L., & Hur, I. (2021). Employees' mobile cyberslacking and their commitment to the organization. *Journal of Computer Information Systems*, 61(2), 141–153. <https://doi.org/10.1080/08874417.2019.1571455>
- Alikhademi, K., Drobina, E., Prioleau, D., Richardson, B., Purves, D., & Gilbert, J. E. (2022). A review of predictive policing from the perspective of fairness. *Artificial Intelligence and Law*, 30(1), 1–17. <https://doi.org/10.1007/s10506-021-09286-4>
- Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest*, 16(2), 40–68. <https://doi.org/10.1177/1529100615593273>

- \*Alqahtani, N., Innab, A., Alammari, K., Alkhateeb, R., Kerari, A., & Alharbi, M. (2022). Cyberloafing behaviours in nursing: The role of nursing stressors. *International Journal of Nursing Practice*, 28(5). <https://doi.org/10.1111/ijn.13079>
- \*Amponsah-Tawiah, K., Mensah, J., & Baafi, N. K. A. (2023). Telecommuting and cyberloafing in the Ghanaian context: The role of employees' emotional exhaustion. *Organization Management Journal*, 20(4), 143–155. <https://doi.org/10.1108/OMJ-11-2021-1403>
- Anandarajan, M., & Simmers, C. A. (Eds.). (2004). *Personal web usage in the workplace: A guide to effective human resources management*. IGI Global. <https://www.igi-global.com/book/personal-web-usage-workplace/162>
- Andreassen, C. S., Torsheim, T., & Pallesen, S. (2014). Use of online social network sites for personal purposes at work: Does it impair self-reported performance? *Comprehensive Psychology*, 3(1), 1–21.
- \*Arar, T., Öneren, M., Öztürk, L., & Yurdakul, G. (n.d.). The relationship between leader-member exchange and cyberloafing: The mediating role of motivation. Retrieved March 23, 2025, from [https://www.researchgate.net/profile/Tayfun-Arar/publication/362021153\\_The\\_Relationship\\_between\\_Leader-Member\\_Exchange\\_and\\_Cyberloafing\\_The\\_Mediating\\_Role\\_of\\_Motivation/links/62d18237d351bd24f519b72a/The-Relationship-between-Leader-Member-Exchange-and-Cyberloafing-The-Mediating-Role-of-Motivation.pdf](https://www.researchgate.net/profile/Tayfun-Arar/publication/362021153_The_Relationship_between_Leader-Member_Exchange_and_Cyberloafing_The_Mediating_Role_of_Motivation/links/62d18237d351bd24f519b72a/The-Relationship-between-Leader-Member-Exchange-and-Cyberloafing-The-Mediating-Role-of-Motivation.pdf)
- \*Arda, A., & Fidan, Y. (2022). The mediating role of perceived organizational punishment in the relationship between ethical values and cyberloafing. *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 11(4), 2011–2028.
- \*Aryani Ghizghapan, E., & Azadi, N. (2023). Modeling the role of organizational ethics atmospheres and work-family conflict in cyber loafing of academic staff with artificial neural network (ANN). *Journal of Family Relations Studies*, 3(10), 4–16. <https://doi.org/10.22098/jfrs.2023.13173.1131>
- Askew, K. L. (2012). *The relationship between cyberloafing and task performance and an examination of the theory of planned behavior as a model of cyberloafing* [Doctoral dissertation, University of South Florida].
- Askew, K. L., Ilie, A., Bauer, J. A., Simonet, D. V., Buckner, J. E., & Robertson, T. A. (2019). Disentangling how coworkers and supervisors influence employee cyberloafing: What normative information are employees attending to? *Journal of Leadership and Organizational Studies*, 26(4), 526–544.
- Askew, K., Buckner, J. E., Taing, M. U., Ilie, A., Bauer, J. A., & Coovert, M. D. (2014). Explaining cyberloafing: The role of the theory of planned behavior. *Computers in Human Behavior*, 36, 510–519. <https://doi.org/10.1016/j.chb.2014.04.006>

- \*Asmara, R. W., Kistyanto, A., & Wardoyo, D. T. W. (2024). Organizational culture and cyberloafing: Assessing their impact on hospital employee performance through job satisfaction. *Jurnal Pendidikan Administrasi Perkantoran (JPAP)*, 12(2), 287–310.
- \*Aulia, I. N., Karyatun, S., Hidayat, R. R., & Soelton, M. (2024). *Review article don't be afraid to change: Work environment and workload affects cyberloafing behavior*. [https://www.researchgate.net/profile/Novia-Azhari/publication/376521342\\_REVIEW\\_ARTICLE\\_DONT\\_BE\\_AFRAID\\_TO\\_CHANGE\\_WORK\\_ENVIRONMENT\\_AND\\_WORKLOAD\\_AFFECTS\\_CYBERLOAFING\\_BEHAVIOR/links/657bfcab6610947889cf1d9a/REVIEW-ARTICLE-DONT-BE-AFRAID-TO-CHANGE-WORK-ENVIRONMENT-AND-WORKLOAD-AFFECTS-CYBERLOAFING-BEHAVIOR.pdf](https://www.researchgate.net/profile/Novia-Azhari/publication/376521342_REVIEW_ARTICLE_DONT_BE_AFRAID_TO_CHANGE_WORK_ENVIRONMENT_AND_WORKLOAD_AFFECTS_CYBERLOAFING_BEHAVIOR/links/657bfcab6610947889cf1d9a/REVIEW-ARTICLE-DONT-BE-AFRAID-TO-CHANGE-WORK-ENVIRONMENT-AND-WORKLOAD-AFFECTS-CYBERLOAFING-BEHAVIOR.pdf)
- \*Aziz, S., Tariq, A., & Ashraf, N. (2024). Perceived over qualification and cyber loafing: Mediating role of moral disengagement and moderating role of moral identity. *Annals of Human and Social Sciences*, 5(2), 146–156. [https://doi.org/10.35484/ahss.2024\(5-II\)14](https://doi.org/10.35484/ahss.2024(5-II)14)
- \*Bagis, F., Adawiyah, W. R., & Sudjadi, A. (2024). Employee's spiritual well-being: Diminishing the negative fibs of job stress, ego depletion and cyberloafing. *Revista de Gestao Social e Ambiental*, 18(6). <https://doi.org/10.24857/RGSA.V18N6-004>
- \*Bagis, F., Badharudin, A. Y., Ikhsani, M. M., & Kusuma, F. A. (2023). Islamic spirituality as a moderating influence between stressor and cyberloafing. *International Journal of Latest Engineering Research and Applications (IJLERA)*, 8(8), 25–30.
- \*Bagis, F., Darmawan, A., & Pratamasari, M. A. (2024). Restraining cyberloafing behavior in private hospital employees: Analysis of work stress factors and locus of control. *Asian Journal of Economics, Business and Accounting*, 24(6), 181–191. <https://doi.org/10.9734/AJEBA/2024/v24i61352>
- \*Bagis, F., Darmawan, A., Pratamasari, M. A., & Kusuma, F. A. (2023). Cyberloafing behavior and self control on the performance of Islamic clinic employees: Organizational commitment as mediation. *Journal of Economics, Finance and Management Studies*, 6(06), 2774–2782.
- \*Bagis, F., Nuraning, N., Suyoto, S., Ikhsani, M. M., & Darmawan, A. (2023). The influence of cyberloafing, self-efficacy, and organizational culture on the performance of employees at Regional Revenue Agency, Banyumas District. *International Journal of Economics, Business and Accounting Research (IJEBAAR)*, 7(1).
- \*Bajcar, B., & Babiak, J. (2023). Excessive internet use in the organizational context: A proposition of the new instrument to measure cyberloafing at work. In Mikyška, J., de Mulatier, C., Krzhizhanovskaya, V. V., Sloom, P. M. A., Paszynski, M., & Dongarra, J. J. (Eds.), *Proceedings of the 39th International Conference on Computers and Their Applications (ICCS 2023): Vol. 14073 LNCS* (pp. 509–523). Springer. [https://doi.org/10.1007/978-3-031-35995-8\\_36](https://doi.org/10.1007/978-3-031-35995-8_36)

- \*Bakış, S. K. K. T. B. (2022). A theoretical overview to the concept of cyberloafing. *International Academic Social Resources Journal*, 7(37), 562–567.
- \*Baş, M., & Şirin, M. (2023). How does workplace ostracism affect employee performance? Mediating role of psychological resilience, moderated mediation role of cyberloafing. *Organizacija*, 56(1), 51–65. <https://doi.org/10.2478/orga-2023-0004>
- \*Bashwira, E., & Bonde, L. (2020). Monitoring cyberloafing through network traffic analysis. *Journal of Applied Social Science, Human Development, and Technology*, 1(1), 35–42.
- \*Batabyal, S. K., & Bhal, K. T. (2020). Traditional cyberloafing, mobile cyberloafing and personal mobile-internet loafing in business organizations: Exploring cognitive ethical logics. *Journal of Information, Communication and Ethics in Society*, 18(4), 631–647. <https://doi.org/10.1108/JICES-07-2019-0081>
- \*Batabyal, S. K., & Bhal, K. T. (2023a). Do challenge and hindrance stressors effect cyberloafing differently? Attentiveness and anger as mediators and trait mindfulness as a moderator. *Australasian Journal of Information Systems*, 27. <https://doi.org/10.3127/ajis.v27i0.4105>
- \*Batabyal, S. K., & Bhal, K. T. (2023b). Push-pull factors and means-end chain framework of cyberloafing: A soft ladderling study using LadderUX. *Journal of Information, Communication and Ethics in Society*, 21(1), 143–160. <https://doi.org/10.1108/JICES-05-2022-0046>
- \*Batool, S., Ibrahim, H., & Adeel, A. (2023c). Cyberloafing, knowledge sharing, autonomous motivation and creativity: A motivation-ability-opportunity perspective. *SSRN Electronic Journal*. Retrieved March 23, 2025, from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4606545](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4606545)
- \*Bernstein, J. (2024). *Do counterproductive and recovery cyberloafing behaviors predict teamwork cohesion?* [Ph.D. dissertation, The Chicago School of Professional Psychology]. *ProQuest Dissertations and Theses (3054674505)*. <https://www.proquest.com/opac.lib.ntnu.edu.tw/dissertations-theses/do-counterproductive-recovery-cyberloafing/docview/3054674505/se-2?accountid=14228>
- \*Bhattacharjee, A., & Sarkar, A. (2024). Abusive supervision and cyberloafing: An investigation based on stressor-emotion-CWB theory. *Information Technology and People*, 37(3), 1126–1155. <https://doi.org/10.1108/ITP-05-2022-0353>
- Bhave, D. P. (2014). The invisible eye? Electronic performance monitoring and employee job performance. *Personnel Psychology*, 67, 605–635.
- \*Bibi, S., Nazir, T., & Shafi, K. (2024). Cyberloafing in nurses and dark leadership: Investigating the impact of despotic leadership, organizational cynicism, and

- cyberloafing: A case from the healthcare sector of Pakistan. *Journal of Business and Management Research*, 3(1), 1141–1154.
- \*Bilkay, S. (2024). The mediating role of career satisfaction in the impact of person-organization fit on cyberloafing. *Romaya Journal: Researches on Multidisciplinary Approaches*, 2024-October(2), 12–22.
- \*Biuki, N. A., Imandar, F., Azhdari, A., Mahmoudabadi, M. Z., & Ardakani, M. S. (2024). Identifying and prioritizing factors behind cyber loafing use at work using multi-criteria decision making (MADM) approach. *International Journal of Management, Accounting & Economics*, 11(10), 1342–1365. <https://doi.org/10.5281/zenodo.13895220>
- Blanchard, A. L., & Henle, C. A. (2008). Correlates of different forms of cyberloafing: The role of norms and external locus of control. *Computers in Human Behavior*, 24(3), 1067–1084. <https://doi.org/10.1016/j.chb.2007.03.008>
- Bloom, N. (2020, March 30). The productivity pitfalls of working from home in the age of COVID-19. *Stanford News*. <https://news.stanford.edu/2020/03/30/productivity-pitfalls-working-home-age-covid-19>
- Bock, G.-W., & Ho, S. L. (2009). Non-work related computing (NWRC). *Communications of the ACM*, 52(4), 124–128. <https://doi.org/10.1145/1498765.1498799>
- \*Bohn, A. (2023). *Investigating the multi-faceted nature of cyberloafing based on job features*.
- Bose, S., Shams, S., Ali, M. J., & Mihret, D. (2022). COVID-19 impact, sustainability performance and firm value: International evidence. *Accounting & Finance*, 62(1), 597–643. <https://doi.org/10.1111/acfi.12801>
- Brock, M. E., Martin, L. E., & Buckley, M. R. (2013). Time theft in organizations: The development of the Time Banditry Questionnaire. *International Journal of Selection and Assessment*, 21(3), 309–321. <https://doi.org/10.1111/ijsa.12040>
- \*Buntarain, B., & Frantzen, F. (2022). Cyberloafing while working from home: Exploring the conceptualisation, drivers and implications.
- \*Cahyaningrum, S. D., & Projo, S. T. (2021). The effect of role stressor on job satisfaction and its effect on job performance: Cyberloafing as mediator. *International Journal of Education and Social Science Research*, 4(02), 39–50. <http://dx.doi.org/10.37500/IJESSR.2021.4205>
- \*Canbolat, M. A. (2023). Impact of digital literacy on cyberloafing and compulsive social media use post-Kahramanmaraş earthquake. In Johnston, S. J., & Singh, S. (Eds.), *Proceedings of the 22nd European Conference on e-Learning, ECEL* (Vols. 2023-October, pp. 33–38). Academic Conferences and Publishing International Limited. <https://doi.org/10.34190/ecel.22.1.1911>

- Cappelli, P. (2020). Stop overengineering people management. *Harvard Business Review*, 98(5), 56–63.
- \*Chakraborty, T., & Ray, S. (2022). Strategies of cyberloafing and phubbing which affect workplace digital transformation. *Московский Экономический Журнал*, 10, 430–446.
- \*Chakraborty, T., Dhir, S., Al-Busaidi, A. S., & Dwivedi, Y. K. (2024). Can remote work be adopted when phubbing and cyber loafing behavior are on the rise? *Journal of Global Information Management (JGIM)*, 32(1), 1–25.
- Chalykoff, J., & Kochan, T. A. (1989). Computer-aided monitoring: Its influence on employee job satisfaction and turnover. *Personnel Psychology*, 42, 807–834.
- Charoensukmongkol, P. (2014). Effects of support and job demands on social media use and work outcomes. *Computers in Human Behavior*, 36, 340–349.  
<https://doi.org/10.1016/j.chb.2014.03.061>
- \*Chavan, M., Galperin, B. L., Ostle, A., & Behl, A. (2021). Millennial’s perception on cyberloafing: Workplace deviance or cultural norm? *Behaviour and Information Technology*, 41(13), 2860–2877. <https://doi.org/10.1080/0144929X.2021.1956588>
- \*Cheng, B., Zhou, X., Guo, G., & Yang, K. (2020). Perceived overqualification and cyberloafing: A moderated-mediation model based on equity theory. *Journal of Business Ethics*, 164(3), 565–577. <https://doi.org/10.1007/s10551-018-4026-8>
- \*Chowdhury, S. J., & Das, D. (2024). Cyberloafing: Examining the growing impact of non-work internet use in the workplace. *International Journal of Contemporary Research in Multidisciplinary*, 3(S4), 93–95.
- \*Cohen, A., & Özsoy, E. (2024). An investigation into cyberloafing and its associations with work and non-work factors. *International Journal of Psychological Studies*, 16(2), 18–27.
- Coker, B. L. S. (2011). Freedom to surf: The positive effects of workplace internet leisure browsing. *New Technology, Work and Employment*, 26(3), 238–247.  
<https://doi.org/10.1111/j.1468-005X.2011.00272.x>
- \*Das, S. R., Seif, M. H., Mahmud, I., & Vafaei-Zadeh, A. (2020). Factors influencing the cyberslacking behavior and internet abusive intention in academic settings: A structural equation modeling approach. *International Journal of Psychosocial Rehabilitation*, 24(5), 7311–7318.
- de Lucas Ancillo, A., Gavrila Gavrila, S., & del Val Núñez, M. T. (2023). Workplace change within the COVID-19 context: The new (next) normal. *Technological Forecasting and Social Change*, 194, 122673. <https://doi.org/10.1016/j.techfore.2023.122673>

- DeFilippis, E., Impink, S. M., Singell, M., Polzer, J. T., & Sadun, R. (2020). Collaborating during coronavirus: The impact of COVID-19 on the nature of work (No. w27612). *National Bureau of Economic Research*. <https://doi.org/10.3386/w27612>
- Dewey, A., & Drahota, A. (2016). Introduction to systematic reviews: Online learning module. *Cochrane Training*. <https://training.cochrane.org/interactivelearning/module-1-introduction-conducting-systematic-reviews>
- \*Dmour, M. M., Bakar, H. S., & Hamzah, M. R. (2020). Antecedent, consequences, and policies view of cyberloafing among the employees. *Journal of Physics: Conference Series*, 1529(2). <https://doi.org/10.1088/1742-6596/1529/2/022016>
- \*Dooly, V. P. (2021). *Strategies to monitor and deter cyberloafing in small businesses: A case study* [PhD thesis, Walden University]. <https://search.proquest.com/openview/adc22ef96b5b70034011da2733978e32/1?pq-origsite=gscholar&cbl=18750&diss=y>
- \*Dudija, N., & Miranti, R. (2024). Cyberloafing in the digital age, disrupting or enhancing performance?: Literature review. *International Journal of Science, Technology & Management*, 5(4), 911–915.
- \*Duran, B., & Metin-Orta, İ. (2024). Abusive supervision as predictor of perceived stress and cyberloafing at work. *İş ve İnsan Dergisi*, 11(2), 138–153.
- \*Elciyar, K., & Simsek, A. (2021). An investigation of cyberloafing in a large-scale technology organization from the perspective of the theory of interpersonal behavior. *Online Journal of Communication and Media Technologies*, 11(2). <https://doi.org/10.30935/ojcm/10823>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- \*Elrehail, H., Rehman, S. U., Chaudhry, N. I., & Alzghoul, A. (2021). Nexus among cyberloafing behavior, job demands and job resources: A mediated-moderated model. *Education and Information Technologies*, 26(4), 4731–4749. <https://doi.org/10.1007/s10639-021-10496-1>
- \*Fakoor Saghih, A. M., & Nosrati, S. (2020). The antecedents of job embeddedness and their effects on cyberloafing among employees of public universities in Eastern Iran. *International Journal of Islamic and Middle Eastern Finance and Management*, 14(1), 77–93. <https://doi.org/10.1108/IMEFM-11-2019-0489>
- \*Fan, T., Khan, J., Khassawneh, O., & Mohammad, T. (2023). Examining toxic leadership nexus with employee cyberloafing behavior via mediating role of emotional exhaustion. *Journal of Organizational and End User Computing*, 35(1), 1–23. <https://doi.org/10.4018/JOEUC.320817>

- \*Farid, F., Akkas, N., & Mande, H. (2024). Cyberloafing behavior on employee performance. *JPPPI (Jurnal Penelitian Pendidikan Indonesia)*, 10(1), 390–398.
- Farivar, F., & Richardson, J. (2020). Workplace digitalisation and work-nonwork satisfaction: The role of spillover social media. *Behaviour & Information Technology*, 40(8), 747–758.
- \*Fateh-Ur-Rahman, Z. R., & Shah, F. A. (2020). Minor and serious cyber-loafing impact on innovative behavior. *Journal of Managerial Sciences*, 14(3), 92–102.
- \*Fikri, F., & Saldamon, Y. (2023). The effect of personality on cyberloafing behavior among administrative staff in Universitas Islam Riau, Indonesia. *International Journal of Psychology and Behavioral Sciences*, 13(1), 7–13.
- Gallagher, E. C. (2009). *Narcissism and forgiveness as moderators of organizational justice and workplace counterproductive computer use* [Master's thesis, University of Nebraska at Omaha]. ProQuest.  
<http://search.proquest.com/docview/250832319/abstract/7A83D7F33D2141A3PQ/1>
- \*George, S., Johnson, J., & Devan, K. (2023). Are employees cyber loafing while working from home? Influence of demographic and organizational factors on cyber loafing behaviour. *Theoretical & Applied Economics*, 30(4), 147–164.
- Gibbs, M., Mengel, F., & Siemroth, C. (2023). Work from home and productivity: Evidence from personnel and analytics data on information technology professionals. *Journal of Political Economy Microeconomics*, 1(1), 7–41. <https://doi.org/10.1086/721803>
- \*Giordano, C., & Mercado, B. K. (2023). Cyberloafing: Investigating the importance and implications of new and known predictors. *Collabra: Psychology*, 9(1).  
<https://doi.org/10.1525/collabra.57391>
- \*Gracia, B. A., & Kusniawatid, N. (2022). Cyberloafing behaviour on employee performance at PT. Telkomsel Serang Branch. *Proceedings of the 2nd Adpebi International Conference on Management, Education, Social Science, Economics and Technology (AICMEST)*, 1–10. <http://adpebipublishing.com/index.php/AICMEST/article/view/187>
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Sage Publications.
- \*Gullu, B. F., & Serin, H. (2020). The relationship between fear of missing out (FoMO) levels and cyberloafing behaviour of teachers. *Journal of Education and Learning*, 9(5), 205–214. <https://doi.org/10.5539/jel.v9n5p205>
- \*Gupta, M., & Chakraborty, A. (2020). Impact of cyberloafing on team potency & team conflict at the workplace. *Indian Journal of Industrial Relations*, 55(4), 696–709.

- \*Güripek, E., Uzun, C., & Cengiz, Ç. (2020). The effect of psychological contract on cyberloafing behavior: Case of travel agencies. *Journal of Recreation and Tourism Research*, 7(1), 77–91. <https://doi.org/10.31771/jrtr.2020.55>
- \*Hafızh, L. B., & Sumadhinata, Y. E. (2023). Effectiveness of self-control and cyberloafing on employee performance: The study of CV Galiya Corp. *Jurnal Maksipreneur: Manajemen, Koperasi, Dan Entrepreneurship*, 13(1), 312–325.
- \*Hai, M., Wu, X., Zhou, B., & Li, Y. (2024). Start task crafting, stay away from cyberloafing: The moderating role of supervisor developmental feedback. *Behavioral Sciences*, 14(10), 960. <https://doi.org/10.3390/bs14100960>
- \*Halimatusyamsiah, F., Indrayanto, A., & Daryono, D. (2023). The influence of abusive supervision and work stress on cyberloafing. *Proceeding of International Conference Sustainable Competitive Advantage*, 4. <http://jp.feb.unsoed.ac.id/index.php/sca-1/article/view/3864>
- \*Harandi, A., & Mirzaeian Khamseh, P. (2024). Can perceived overqualification increase cyberloafing? An emphasis on the mediating role of emotional exhaustion. *Interdisciplinary Journal of Management Studies*, 17(2), 409–424. <https://doi.org/10.22059/ijms.2023.339410.674982>
- \*Harjadi, D., Fitriani, L. K., Djuniardi, D., & Supriatna, O. (2024). Analysis of the effect of job burnout and organizational commitment on employee performance mediated by cyberloafing behavior. *Journal of Social Research*, 3(2).
- Hassan, H. M., Reza, D. M., & Farkhad, M. A. A. (2015). An experimental study of influential elements on cyberloafing from general deterrence theory perspective: Case study: Tehran Subway Organization. *International Business Research*, 8(3), 91–98.
- \*Heidari Aqagoli, P., Safari, A., & Shahin, A. (2024). Cyberloafing attractiveness: A mixed-method based on Q methodology and Kano model. *International Journal of Organizational Analysis*, 32(2), 373–396. <https://doi.org/10.1108/IJOA-10-2022-3460>
- \*Henle, C. A. (2024). Shifting the literature from who and when to why: Identifying cyberloafing motives. *Applied Psychology*, 73(1), 495–501. <https://doi.org/10.1111/apps.12470>
- Henle, C. A., Kohut, G., & Booth, R. (2009). Designing electronic use policies to enhance employee perceptions of fairness and to reduce cyberloafing: An empirical test of justice theory. *Computers in Human Behavior*, 25(4), 902–910.
- \*Hensel, P. G., & Kacprzak, A. (2020). Job overload, organizational commitment, and motivation as antecedents of cyberloafing: Evidence from employee monitoring software. *European Management Review*, 17(4), 931–942. <https://doi.org/10.1111/emre.12407>

- \*Herman, A. F., Akib, H., Saleh, S., & Rivai, A. M. (2024). The influence of cyberloafing on employee performance at the Cooperatives and SMEs Office of South Sulawesi Province. *Business Research and Administration Innovation*, 1(3), 121–130.
- \*Hernandez, R. A. (2022). *Cyberloafing and technostress: Working from home during a pandemic* [Ph.D., Walden University]. *ProQuest Dissertations and Theses* (2728502639). <https://0-www.proquest.com.opac.lib.ntnu.edu.tw/dissertations-theses/cyberloafing-technostress-working-home-during/docview/2728502639/se-2?accountid=14228>
- \*Hu, D., & Lan, Y. (2024). The dual path effect mechanism study of digital-HRM on employee innovative performance and cyberloafing. *PLoS One*, 19(8). <https://doi.org/10.1371/journal.pone.0307195>
- \*Hu, Y., Chen, Y., & Ye, M. (2023). Eager to belong: Social cyberloafing as a coping response to workplace ostracism. *Current Psychology*, 42(4), 3372–3381. <https://doi.org/10.1007/s12144-021-01690-y>
- \*Hurriyati, D., & Marlinda, I. (2023). The relationship between job stress and cyberloafing behavior in administrative and HR employees of Sunan Rubber Palembang Ltd. *Endless: International Journal of Future Studies*, 6(1), 239–256.
- \*Husna, A., Nurhasanah, N., & Prayoga, T. (2022). The effect of workload, role conflict, and work environment on cyberloafing behavior in the marine and fishery services of the Riau Islands. *Journal of Research in Business, Economics, and Education*, 4(3), 42–50. <https://doi.org/10.55683/jrbee.v4i3.390>
- \*Hussain, S., & Ali, A. (2021). “I am what I ought to be”: Women cyberslacking in Ethiopian public university. *Pertanika Journal of Social Sciences and Humanities*, 29(4), 2207–2224. <https://doi.org/10.47836/pjssh.29.4.06>
- \*Hutchins, C. (胡溪佳). (2020). *Loafing in a digital world: A Caribbean perspective examining organizational justice, work engagement and cyberloafing* [M.B.A., National Taiwan Normal University (Taiwan)]. *PQDT - Global* (2738208942). <https://0-www.proquest.com.opac.lib.ntnu.edu.tw/dissertations-theses/loafing-digital-world-caribbean-perspective/docview/2738208942/se-2?accountid=14228>
- \*Ibrahim, A. A., & Helaly, S. H. (2022). Cyber loafing, procrastination and job conscientiousness among head nurses at Main Mansoura University Hospital. *Assiut Scientific Nursing Journal*, 10(30), 162–172. <https://doi.org/10.21608/ASNJ.2022.135492.1369>
- \*Iravani, M., Jafarpour Boroujeni, A. A., & Hashemian, M. (2024). EFL teachers’ cyberloafing behaviors: Can burnout predict them? *Education and Information Technologies*, 29(18), 25035–25068. <https://doi.org/10.1007/s10639-024-12804-x>

- \*Işıl, I. U., & Köse, B. Ç. (2022). The moderating role of work stress in the effect of autocratic leadership on cyberloafing behavior: A study in hotel businesses. *Gastroia: Journal of Gastronomy and Travel Research*, 6(1), 1–17.
- \*Islam, S. U., Amjad, K., Ali, S. A., & Khurshed, F. (2020). Impact of family incivility upon cyberloafing: Moderating effect of the level of need for achievement. *International Journal of Business and Economic Affairs*, 5(6), 300–310.
- \*Ismail, A. F. M. B., Sam, M. F. B. M., & Isa, S. S. M. (2021). Impact factors of cyberloafing on employees' productivity in Malaysia Institute of Higher Learning. *Academy of Entrepreneurship Journal*, 27, 1–10.
- Jeske, D., & Santuzzi, A. M. (2015). A review, framework, and research agenda for electronic performance monitoring. *Journal of Organizational Behavior*, 36(S1), S2–S21.  
<https://doi.org/10.1002/job.1966>
- \*Jha, N., Malik, P., Patel, G. N., & Cvetkoska, V. (2024). Unveiling the roots of cyberloafing: A fuzzy analytic hierarchy perspective on antecedents in the Indian IT landscape. *Croatian Operational Research Review*, 15(1), 51–61. <https://doi.org/10.17535/crorr.2024.0005>
- \*Jiang, H., Siponen, M., Jiang, Z. J., & Tsohou, A. (2024). The impacts of internet monitoring on employees' cyberloafing and organizational citizenship behavior: A longitudinal field quasi-experiment. *Information Systems Research*, 35(3), 1175–1194.  
<https://doi.org/10.1287/isre.2020.0216>
- \*Juniar, R., & Arijanto, A. (2024). The influence of workload and work stress mediated by burnout on cyberloafing behavior in the pharmaceutical industry's R&D department. *Jurnal Akuntansi, Manajemen, Dan Perencanaan Kebijakan*, 2(1).
- \*Juwita, J., Ahman, E., Sojanah, J., & Rofaida, R. (2024). The influence of cyberloafing behavior and job stress on employee performance. *The Eurasia Proceedings of Educational and Social Sciences*, 37, 39–50.
- \*Kabir, E. B., & Rabby, S. M. A. H. (2023). Self-efficacy as a predictor of cyberloafing: The role of mastery experience, vicarious experience, verbal persuasion, and physiological states. *International Journal of Research Publication and Review*, 4(6), 1691–1701.
- \*Kaçmaz, E., & Şimşek, E. (2023). Enhancing psychological capital in the digital age: A fresh look to cyberloafing phenomenon. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 23(4), 1273–1294. <https://doi.org/10.18037/ausbd.1375642>
- \*Kalejaiye, P. O., & Hamed, S. T. (2021). Managing employees' workplace cyberloafing in a public university's information and communication technology center. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 2(1), 354–373.
- \*Kaptangil, K., Asan, K., & Kinay, A. G. (2021). The effect of the cyberloafing behaviors of tourism business employees on business motivations and organizational identification.

*Tourism and Management Studies*, 17(1), 31–43.  
<https://doi.org/10.18089/TMS.2021.170103>

- \*Karimi Mazidi, A., Rahimnia, F., Mortazavi, S., & Lagzian, M. (2021). Cyberloafing in public sector of developing countries: Job embeddedness as a context. *Personnel Review*, 50(7–8), 1705–1738. <https://doi.org/10.1108/PR-01-2020-0026>
- \*Kaur, G., Parti, A. K., & Kaur, R. B. (2020). Factors influencing cyberloafing: A case of selected banks in and around Chandigarh. *PIMT Journal of Research*, 12(4B), 128–131.
- \*Khan, J., Saeed, I., Ali, A., & Nisar, H. G. (2021). The mediating role of emotional exhaustion in the relationship between abusive supervision and employee cyberloafing behaviour. *Journal of Management and Research*, 8(1), 160–178.  
<https://doi.org/10.29145/jmr/81/080107>
- \*Khan, J., Saeed, I., Fayaz, M., Zada, M., & Jan, D. (2023). Perceived overqualification? Examining its nexus with cyberloafing and knowledge hiding behaviour: Harmonious passion as a moderator. *Journal of Knowledge Management*, 27(2), 460–484.  
<https://doi.org/10.1108/JKM-09-2021-0700>
- \*Khari, C., & Sinha, S. (2024). Job autonomy and cyberloafing: A mediated moderation model of work engagement and mindfulness. *Evidence-Based HRM: A Global Forum for Empirical Scholarship*. <https://doi.org/10.1108/EBHRM-05-2023-0117>
- \*Khorakian, A., Jahangir, M., Rahi, S., Eslami, G., & Muterera, J. (2024). Remote working and work performance during the COVID-19 pandemic: The role of remote work satisfaction, digital literacy, and cyberslacking. *Behaviour and Information Technology*, 43(10), 1938–1956. <https://doi.org/10.1080/0144929X.2023.2235026>
- Kidwell, R. E. (2010). Loafing in the 21st century: Enhanced opportunities—and remedies—for withholding job effort in the new workplace. *Business Horizons*, 53(6), 543–552.  
<https://doi.org/10.1016/j.bushor.2010.06.001>
- Kidwell, R. E., & Sprague, R. (2009). Electronic surveillance in the global workplace: Laws, ethics, research, and practice. *New Technology, Work, and Employment*, 24(2), 194–208.
- Kim, S. J., & Byrne, S. (2011). Conceptualizing personal web usage in work contexts: A preliminary framework. *Computers in Human Behavior*, 27(6), 2271–2283.
- Kim, S., & Christensen, A. L. (2017). The dark and bright sides of personal use of technology at work: A job demands–resources model. *Human Resource Development Review*, 16(4), 425–447. <https://doi.org/10.1177/1534484317725438>
- \*Kim, Y. J., Aslam, M. S., Deng, R., Leghari, Q. A., Lkhagvasuren, D., Nadir, M. N., Qian, L., & Shahnaz, S. (2022). Assessing the workplace cyberloafing behavior among pharmacists in Pakistan. *Journal of Research in Pharmacy Practice*, 11(2), 73–79.

- \*Kiroh, P. N., Lopian, S. J., & Tielung, M. V. (2023). The influence of role ambiguity, role conflict, and role overload on employee cyberloafing behavior at PT. United Tractors, TBK Manado Branch. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 11(4), 1575–1586.
- Koay, K. Y. (2018). Workplace ostracism and cyberloafing: A moderated–mediation model. *Internet Research*, 28(4), 1122–1141. <https://doi.org/10.1108/IntR-07-2017-0268>
- \*Koay, K. Y. (2024). Responsible leadership and cyberloafing: The mediating role of felt obligation and the moderating role of organisational identification. *International Journal of Organizational Analysis*. <https://doi.org/10.1108/IJOA-07-2024-4687>
- \*Koay, K. Y., & Lai, C. H. Y. (2023). Workplace ostracism and cyberloafing: A social cognitive perspective. *Management Research Review*, 46(12), 1769–1782. <https://doi.org/10.1108/MRR-07-2022-0490>
- \*Koay, K. Y., Lim, V. K. G., Soh, P. C.-H., Ong, D. L. T., Ho, J. S. Y., & Lim, P. K. (2022). Abusive supervision and cyberloafing: A moderated moderation model of moral disengagement and negative reciprocity beliefs. *Information & Management*, 59(2), 103600. <https://doi.org/10.1016/j.im.2022.103600>
- Koch, A. K., & Nafziger, J. (2016). Gift exchange, control, and cyberloafing: A real-effort experiment. *Journal of Economic Behavior and Organization*, 131, 409–426.
- \*Korzynski, P., & Protsiuk, O. (2024). What leads to cyberloafing: The empirical study of workload, self-efficacy, time management skills, and mediating effect of job satisfaction. *Behaviour and Information Technology*, 43(1), 200–211. <https://doi.org/10.1080/0144929X.2022.2159525>
- Kossek, E. E., & Lautsch, B. A. (2018). Work–life flexibility for whom? Occupational status and work–life inequality in upper, middle, and lower level jobs. *The Academy of Management Annals*, 12(1), 5–36. <https://doi.org/10.5465/annals.2016.0059>
- \*Kularathne, H., & Senevirathne, Y. (2021). Does cyberloafing adversely effect to employee performance. *Asian Journal of Social Science and Management Technology*, 3(2), 1–6.
- Kuschnaroff, F. C., & Bayma, F. O. (2014). Critical analysis of cyberslacking in organizational structures. *Journal of Human Resource and Sustainability Studies*, 2(2), 70–90. <https://doi.org/10.4236/jhrss.2014.22007>
- Kwak, D. H., Lee, S., Ma, X., Lee, J., Lara, K., & Brandyberry, A. (2021). Announcement of formal controls as phase-shifting perceptions: Their determinants and moderating role in the context of mobile loafing. *Internet Research*, 31(5), 1874–1898. <https://doi.org/10.1108/INTR-11-2019-0479>

- \*Kwala, A. F., & Agoyi, M. (2024). The nexus between cyberloafing and employee well-being: Role of creativity in the Nigerian service sector. *Humanities & Social Sciences Communications*, 11(1), 1673. <https://doi.org/10.1057/s41599-024-03928-z>
- Lavoie, J. A. A., & Pychyl, T. A. (2001). Cyberslacking and the procrastination superhighway: A web-based survey of online procrastination, attitudes, and emotion. *Social Science Computer Review*, 19(4), 431–444.
- \*Leovani, E., & Yakuputri, A. T. (2024). The moderator effect of cyberloafing on workload and employee performance. *KnE Social Sciences*, 853–867. <https://doi.org/10.18502/kss.v9i14.16149>
- \*Li, Y. (2021). Employee self-development or cyberloafing? The effects of occupational future time perspective on employee’s behaviors. *Journal of Human Resource and Sustainability Studies*, 9(01), 30.
- \*Liang, X., Guo, G., Gong, Q., Li, S., & Li, Z. (2022). Cyberloafing to escape from the “devil”: Investigating the impact of abusive supervision from the third-party perspective. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.722063>
- \*Liani, L., Baidun, A., & Rahmah, M. (2021). The influence of big five personality trait and self control on cyberloafing. *Proceedings of the 9th International Conference on Cyber and IT Service Management (CITSM 2021)*, 1–5. <https://doi.org/10.1109/CITSM52892.2021.9588899>
- \*Lim, P. K., Koay, K. Y., & Chong, W. Y. (2021). The effects of abusive supervision, emotional exhaustion and organizational commitment on cyberloafing: A moderated-mediation examination. *Internet Research*, 31(2), 497–518. <https://doi.org/10.1108/INTR-03-2020-0165>
- Lim, V. K. (2002). The IT way of loafing on the job: Cyberloafing, neutralizing and organizational justice. *Journal of Organizational Behavior*, 23(5), 675–694. <https://doi.org/10.1002/job.161>
- Lim, V. K. G., & Chen, D. J. Q. (2012). Cyberloafing at the workplace: Gain or drain on work? *Behaviour & Information Technology*, 31(4), 343–353. <https://doi.org/10.1080/01449290903353054>
- Lim, V. K. G., & Teo, T. S. H. (2005). Prevalence, perceived seriousness, justification and regulation of cyberloafing in Singapore: An exploratory study. *Information and Management*, 42, 1081–1093.
- \*Lim, V. K. G., & Teo, T. S. H. (2024a). Advancing research on cyberloafing: Response to commentaries on “Cyberloafing: A review and research agenda.” *Applied Psychology*, 73(1), 485–489. <https://doi.org/10.1111/apps.12494>

- \*Lim, V. K. G., & Teo, T. S. H. (2024b). Cyberloafing: A review and research agenda. *Applied Psychology*, 73(1), 441–484. <https://doi.org/10.1111/apps.12452>
- \*Liu, L., & Zhang, C. (2023). Cyberloafing at the workplace: Effect of Zhong-Yong thinking on mental health and mindfulness as a moderating role. *Chinese Management Studies*, 17(3), 529–544. <https://doi.org/10.1108/CMS-09-2021-0381>
- \*Liu, M., Sun, Y., Liu, T., & Qi, L. (2024). Being a focused employee: Effects of job reattachment on cyberloafing. *Stress and Health*, 40(5). <https://doi.org/10.1002/smi.3449>
- \*Liu, W., Jia, J., & Cao, R. (2024). The mixed blessing of work-related use of information and communication technologies after hours on cyberloafing. *Asia Pacific Journal of Human Resources*, 63(1). <https://doi.org/10.1111/1744-7941.12423>
- \*Liu, Y., & Wu, W. (2023). The effects of abusive supervision on cyberloafing behavior. *SHS Web of Conferences*, 166. <https://doi.org/10.1051/shsconf/202316601007>
- \*Lu, X., Wang, Y., Chen, X., & Lu, Q. (2024). From stress to screen: Understanding cyberloafing through cognitive and affective pathways. *Behavioral Sciences*, 14(3), 249. <https://doi.org/10.3390/bs14030249>
- \*Luna, A. (2024). *Empirical assessment of remote workers' cyberslacking and computer security posture to assess organizational cybersecurity risks* [Ph.D. dissertation, Nova Southeastern University]. ProQuest Dissertations & Theses Global. <https://www.proquest.com/opac.lib.ntnu.edu.tw/dissertations-theses/empirical-assessment-remote-workers-cyberslacking/docview/3057547990/se-2?accountid=14228>
- Lund, J. (1992). Electronic performance monitoring: A review of research issues. *Applied Ergonomics*, 23, 54–58.
- \*Luo, X. (Robert), Xu, F., Zhang, J., Xiao, S., & Xue, B. (2022). Effects of organizational controls on employees' cyber-loafing: The moderating effects of trait mindfulness. *ACM SIGMIS Database: The DATABASE for Advances in Information Systems*, 53(1), 61–79. <https://doi.org/10.1145/3514097.3514102>
- \*Ma, L., Zhang, X., & Yu, P. (2024). Enterprise social media usage and social cyberloafing: An empirical investigation using the JD-R model. *Internet Research*, 34(3), 939–959. <https://doi.org/10.1108/INTR-04-2021-0239>
- \*Ma, Q., & Xie, Y. (2024). The effects of illegitimate tasks on task crafting and cyberloafing: The role of stress mindset and stress appraisal. *Behavioral Sciences*, 14(7), 600. <https://doi.org/10.3390/bs14070600>
- Madden, M. (2009). *The audience for online video-sharing sites shoots up*. Pew Internet & American Life Project. <https://www.pewresearch.org/internet/2009/07/29/the-audience-for-online-video-sharing-sites-shoots-up/>

- Majumdar, P., Biswas, A., & Sahu, S. (2020). COVID-19 pandemic and lockdown: Cause of sleep disruption, depression, somatic pain, and increased screen exposure of office workers and students of India. *Chronobiology International*.  
<https://doi.org/10.1080/07420528.2020.1786107>
- \*Mashal, H. M. (2020). A review of cyberloafing predictors in literature. *Sustainable Business and Society in Emerging Economies*, 2(1), 21–27.
- \*Masruroh, R., Budiman, A., Dodi, D., Komarudin, M. N., & Irawan, N. (2024). Self-control and organizational commitment views of cyberloafing behavior. *JURISMA: Jurnal Riset Bisnis & Manajemen*, 14(1), 167–174.
- McPhail, R., Chan, X. W. (Carys), May, R., & Wilkinson, A. (2024). Post-COVID remote working and its impact on people, productivity, and the planet: An exploratory scoping review. *The International Journal of Human Resource Management*, 35(1), 154–182.  
<https://doi.org/10.1080/09585192.2023.2221385>
- \*Megaputri, N. E., & Suharti, L. (2022). The effect of role ambiguity and organizational justice on cyberloafing with job stress as a mediation variable. *International Journal of Social Science and Business*, 6(2), 268–274.
- Mercado, B. K., Giordano, C., & Dilchert, S. (2017). A meta-analytic investigation of cyberloafing. *Career Development International*, 22(5), 546–564.  
<https://doi.org/10.1108/CDI-08-2017-0142>
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation* (2nd ed.). Jossey-Bass.
- Mertens, D. M. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (2nd ed.). Sage.
- \*Mishra, D., & Tajeja, N. (2022). Cyberslacking for coping stress? Exploring the role of mindfulness as personal resource. *International Journal of Global Business and Competitiveness*, 17(Suppl 1), S56–S67.
- \*Mkhize, N. B., Nyide, C. J., & Mthlane, P. P. (2024). Evaluation of managerial tools for preventing and controlling cyber-loafing among administrative staff: A case study of a selected municipality in KwaZulu-Natal, South Africa. *African Journal of Inter/Multidisciplinary Studies*, 6(1), 1–12. <https://doi.org/10.51415/ajims.v6i1.1374>
- \*Mohammed, Z. S., & Dawood, T. Z. Y. (2024). The effect of cyberloafing behavior and organizational commitment on job performance. *Journal of Administration and Economics*, 48(142), 251–270.
- \*Moningkey, R., & Franksiska, R. (2020). The influence of social media addiction to employees performance with cyberloafing as intervening variable. *International Journal of Social Science and Business*, 4(2), 251–258.

- \*Muafi, M. (2023). The effects of cyberloafing on organizational commitment: The role of emotional exhaustion and job overload. *JBTI: Jurnal Bisnis: Teori Dan Implementasi*, 14(2), 323–337. <https://doi.org/10.18196/jbti.v14i2.19486>
- \*Munawar, S., Khan, M. I., & Hussain, M. A. (2023). Impact of idiosyncratic deals on creative performance through the mediating role of thriving and dispositional envy and moderating role of cyber loafing. *Research Journal for Societal Issues*, 5(2), 253–271. <https://doi.org/10.56976/rjsi.v5i2.108>
- \*Mustapha, H. A., Ojeleye, Y. C., & Shaibu, B. O. (2024). Workplace boredom, cyberloafing and work engagement of insurance companies in Nigeria: Moderating role of mindfulness. *African Journal of Social and Behavioural Sciences*, 14(6).
- \*Muthuswamy, V. V., & Varshika, G. (2023). Employees performance in digital environment: Role of cyber-loafing, electronic monitoring, social media context awareness and job crafting. *International Journal of Cyber Criminology*, 17(1), 128–145.
- \*Nardi, R., Syahbandi, S., Jaya, A., Fauzan, R., & Fahrana, Y. (2024). The influence of cyberloafing and hustle culture on performance: Mental health as mediator among Gen Z employees. *International Journal of Economics, Business and Accounting Research (IJEBAAR)*, 8(4), 1030–1044.
- \*Narwal, M. (2023). Digital distractions in the workplace: Exploring cyberloafing impact on employee behaviour and innovation. *Virtual Economics*, 6(4), 7–24. [https://doi.org/10.34021/ve.2023.06.04\(1\)](https://doi.org/10.34021/ve.2023.06.04(1))
- Nesher Shoshan, H., & Wehrt, W. (2022). Understanding “Zoom fatigue”: A mixed-method approach. *Applied Psychology*, 71(3), 827–852. <https://doi.org/10.1111/apps.12360>
- \*Ngowella, G. D., Loua, L. R., & Suharnomo, S. (2022). A review on cyberloafing: The effects of social platforms on work performance. *Asia Pacific Fraud Journal*, 7(1), 27–39.
- \*Nivedhitha, K. S., & Sheik Manzoor, A. K. (2020). Get employees talking through enterprise social media! Reduce cyberslacking: A moderated mediation model. *Internet Research*, 30(4), 1167–1202. <https://doi.org/10.1108/INTR-04-2019-0138>
- \*Novianti, K. R., & Roz, K. (2023). Cyberloafing behavior: The determinant factors related to work stress and workload in the banking sector. *Jurnal Aplikasi Bisnis Dan Manajemen (JABM)*, 9(2), 378–378.
- \*Novianti, S., & Sjabadhyni, B. (2021). Work-home interaction and psychological distress during the COVID-19 pandemic: The mediation effect of cyberloafing. *Humanitas Indonesian Psychological Journal*, 18(2), 87–99. <https://doi.org/10.26555/humanitas.v18i2.18603>
- \*Nuraeni, Limakrisna, N., Hartoyo, H., & Diana. (2023). Cyberloafing mediation of the Big Five personalities on the performance of Generation Z employees in the South Jakarta Region.

*International Journal of Professional Business Review*, 8(6), 1–15.  
<https://doi.org/10.26668/businessreview/2023.v8i6.2292>

- \*Nurhasanah, N., Wulandari, K., & Husna, A. (2021). Impact of workload and work environment on cyberloafing behavior. *Journal of Research in Business, Economics, and Education*, 3(4), 8–13.
- \*Nurtjahjanti, H. (2022). Cyberloafing as resent digital leisure at Asian office—A systematic scoping review protocol. <https://osf.io/preprints/yjpvvg/>
- \*Nurtjahjanti, H., Hidayat, R., & Indrayanti, I. (2022). Measuring cyberloafing in the new normal era: A general approach. In *Proceedings of the 3rd International Conference on Psychological Studies (ICPsyche)*, 3, 55–65.
- \*Nurtjahjanti, H., Hidayat, R., & Indrayanti, I. (2024). Development and psychometric evaluation of the Employee’s Workplace Cyberloafing Scale (EWCS). *Heliyon*, 10(20). <https://doi.org/10.1016/j.heliyon.2024.e39376>
- \*Nusrat, A., He, Y., Luqman, A., Mehrotra, A., & Shankar, A. (2023). Unraveling the psychological and behavioral consequences of using enterprise social media (ESM) in mitigating the cyberslacking. *Technological Forecasting and Social Change*, 196, 122868. <https://doi.org/10.1016/j.techfore.2023.122868>
- \*Nusrat, A., He, Y., Luqman, A., Nijjer, S., & Gugnani, R. (2024). From slack to strength: Examining ESNs impact on mental toughness and cyberslacking in the workplace. *Technological Forecasting and Social Change*, 198, 122950. <https://doi.org/10.1016/j.techfore.2023.122950>
- \*Nyoto, Sudarno, Priyono, Surikin, & Renaldo, N. (2023). Emotional intelligence, workload, and cyberloafing on organizational commitment and performance of teachers at the Pelalawan high school level. *Journal of Applied Business and Technology*, 4(2), 134–143. <https://doi.org/10.35145/jabt.v4i2.129>
- \*Ohana, M., Murtaza, G., Haq, I., Al-Shatti, E., & Chi, Z. (2024). Why and when can CSR toward employees lead to cyberloafing? The role of workplace boredom and moral disengagement. *Journal of Business Ethics*, 189(1), 133–148. <https://doi.org/10.1007/s10551-023-05358-4>
- \*Ojică, A.-S. (2022). The relationship between meaningful work and cyberloafing: The mediating role of boredom at work. *Studia Doctoralia. Psychology and Educational Science*, 13(2), 133–138.
- \*Okpamen, K. O., & Apayiwu, A. L. (2024). Entrepreneurial intention and cyberloafing behaviour among Federal University Wukari staff. In *1st International Conference of the Faculty of Social Sciences, Federal University Wukari, Taraba State, Nigeria* (pp. 159–169).

- Oravec, J. A. (2002). Constructive approaches to Internet recreation in the workplace. *Communications of the ACM*, 45(1), 60–63. <https://doi.org/10.1145/502269.502298>
- \*Oravec, J. A. (2023). The shape of workbreaks to come: Reframing cyberslacking with bossware and artificial intelligence. *Journal of Organizational and End User Computing*, 35(3), 1–17. <https://doi.org/10.4018/JOEUC.329596>
- \*Ortiz, M. A. L. (2024). Cyberloafing and organizational citizenship behavior as correlates of performance: Towards an enhanced evaluation tool. *International Journal of Multidisciplinary: Applied Business and Education Research*, 5(12), 4924–4931.
- \*Osei, H. V., Ampofo, I. A. J., & Osei, A. (2022). The role of prescriptive social norms on employees' cyberloafing: The moderating effect of power distance and co-workers' interdependency. *International Journal of Organization Theory & Behaviour*, 25(34), 131–149. <https://doi.org/10.1108/IJOTB-11-2021-0210>
- \*Ötken, A. B., Bayram, A., Beşer, S. G., & Kaya, Ç. (2023). Are time management and cyberloafing related? Investigating employees' attitudes. *Global Business Review*, 24(5), 874–886. <https://doi.org/10.1177/0972150920931060>
- \*Özcan, H. M., & Koç, U. (2023). The role of fear of missing out (FoMO) in the relationship between personality traits and cyberloafing. *Ege Academic Review*, 23(1), 11–26. <https://doi.org/10.21121/eab.987487>
- \*Özder, R. (2023). Predicting cyberslacking behavior in terms of demographic variables: A call center case. *Kent Akademisi*, 16(Türkiye Cumhuriyetinin 100. Yılı Özel Sayısı | Special Issue for the 100th Anniversary of the Republic of Türkiye), 231–248. <https://doi.org/10.35674/kent.1351091>
- \*Özek, B. C., & Başarangel, İ. (2023). The effects of personality traits on cyberloafing behaviors and burnout levels of hotel employees on case of İzmir Konak District. *Anais Brasileiros de Estudos Turísticos: ABET*, 13(1), 8.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- \*Pangani, J., & Munyenembe, B. (2024). The impact of stress and loneliness on cyberloafing of health workers in Malawi: The moderating role of age. *African Journal of Empirical Research*, 5(3), 640–648.
- \*Pardim, V. I., Pinochet, L. H. C., & Souza, C. A. de. (2024). Analysis of antecedent factors that lead to cyberloafing and deviant behavior in response to the announcement of formal controls. *Organizações & Sociedade*, 31, 117–148.

- \*Pariyanti, E., Adawiyah, W. R., & Wulandari, S. Z. (2022). Organizational justice, job stress, and cyberloafing: The moderating role of Islamic workplace spirituality. *Journal of Behavioral Science*, 17(3), 90–105. <https://doi.org/10.14456/tjbs.2022.45>
- Pee, L. G., Woon, I. M. Y., & Kankanhalli, A. (2008). Explaining non-work-related computing in the workplace: A comparison of alternative models. *Information & Management*, 45(2), 120–130. <https://doi.org/10.1016/j.im.2008.01.004>
- \*Peng, J., Hou, N., Zou, Y., & Long, R. (2023). Participative leadership and employees' cyberloafing: A self-concept-based theory perspective. *Information and Management*, 60(8), 103878. <https://doi.org/10.1016/j.im.2023.103878>
- \*Peng, J., Nie, Q., & Chen, X. (2023). Managing hospitality employee cyberloafing: The role of empowering leadership. *International Journal of Hospitality Management*, 108, 103349. <https://doi.org/10.1016/j.ijhm.2022.103349>
- \*Permadi, D. (2021). *The influence of job stress, job satisfaction, organizational culture and cyberloafing toward job performance at PT. Perwita Konstruksi* [Bachelor's thesis, Universitas Islam Indonesia]. <https://dspace.uii.ac.id/handle/123456789/31524>
- \*Phillips, R. (2020). *Age, sex, and personality as predictors of job satisfaction and cyberslacking in an all remote workforce* [Ph.D., Capella University]. ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. <https://0-www.proquest.com.opac.lib.ntnu.edu.tw/dissertations-theses/age-sex-personality-as-predictors-job/docview/2390161300/se-2?accountid=14228>
- Pindek, S., Krajcevska, A., & Spector, P. E. (2018). Cyberloafing as a coping mechanism: Dealing with workplace boredom. *Computers in Human Behavior*, 86, 147–152. <https://doi.org/10.1016/j.chb.2018.04.040>
- \*Puentes, M. J. (2021). *A qualitative descriptive study of cyberloafing in South Texas* [Ph.D., Grand Canyon University]. ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global. <https://0-www.proquest.com.opac.lib.ntnu.edu.tw/dissertations-theses/qualitative-descriptive-study-cyberloafing-south/docview/2561044106/se-2?accountid=14228>
- \*Purakusumah, D. I., & Soegoto, D. S. (2023). The influence of cyberloafing behavior, work-life balance and work environment on building construction employee performance. *Proceeding of International Conference on Business, Economics, Social Sciences, and Humanities*, 6, 152–158. <https://proceedings.unikom.ac.id/index.php/icobest/article/view/363>
- \*Putrie, N. R., & Lestari, E. R. (2024). The role of cyberloafing and procrastination behaviour on employee engagement and their impact on employee performance. In Riza, D. F. A., Izza, N., Gustinasari, K., Maharsih, I. K., Sunarharum, W. B., Nurcholis, M., Dewanti, B. S. D., Widayanti, V. T., Mufidah, E., Qisthiya, I., Karadag, D., Idrus, S., Umakoshi, H., Lee, Y. C., Fatchurrahman, D., Zhu, M., Omwange, K. A., & Addini, T. (Eds.), *BIO Web of Conferences* (Vol. 90). EDP Sciences. <https://doi.org/10.1051/bioconf/20249003001>

- \*Qian, X., Li, W., Zhao, Y., & Wang, Y. (2023). Workplace negative gossip atmosphere and employees' cyberloafing behaviors: Effects and mechanisms. *E3S Web of Conferences*, 409, 04010. <https://doi.org/10.1051/e3sconf/202340904010>
- \*Rahaei, A., & Salehzadeh, R. (2020). Evaluating the impact of psychological entitlement on cyberloafing: The mediating role of perceived organizational justice. *Vilakshan – XIMB Journal of Management*, 17(1/2), 137–152.
- \*Rahmadi, A., & Yenita. (2022). Impact of organizational justice, abusive supervisor, and self-control on cyberloafing behavior during COVID-19 pandemic with work stress as a mediation variable: Study on travel companies in South Jakarta. In *Proceedings of the 3rd Asia Pacific International Conference on Industrial Engineering and Operations Management* (pp. 4606–4614). <http://ieomsociety.org/proceedings/2022malaysia/774.pdf>
- \*Rahman, M. F. W., Kistyanto, A., & Surjanti, J. (2022). Does cyberloafing and person-organization fit affect employee performance? The mediating role of innovative work behavior. *Global Business and Organizational Excellence*, 41(5), 44–64. <https://doi.org/10.1002/joe.22159>
- \*Rahmawati, L., Wijono, D., & Nurani, P. A. (2024). The influence of cyberloafing behavior, organizational commitment, and locus of control on employee performance through job satisfaction as a mediating variable at CV. Maketees Industries. In *Proceedings of the UPY-ICCCM International Conference on Education and Social Science (UPINCESS 2024)* (pp. 45–52).
- \*Rajput, M. K. N., & Parimal, B. S. (2020). Organizational justice as a predictor of cyberloafing: A survey research. *GAP Indian Journal of Forensics and Behavioural Sciences*, 1(1), 44–49.
- \*Raza, S., Anwar, B., & Bano, M. (2024). The impact of innovative corporate social irresponsibility on cyber loafing: The mediating role of job satisfaction. *Journal of Managerial and Social Science Innovations*, 1(2), 16–31.
- \*Razak, R. A., Rahman, N. H. A., & Kamil, N. L. M. (2024). Does cyberloafing affect work performance of the civil servants? *Public Administration Issues*, 5, 90–110. <https://doi.org/10.17323/1999-5431-2024-0-5-90-110>
- \*Reizer, A., Galperin, B. L., Chavan, M., Behl, A., & Pereira, V. (2022). Examining the relationship between fear of COVID-19, intolerance for uncertainty, and cyberloafing: A mediational model. *Journal of Business Research*, 145, 660–670. <https://doi.org/10.1016/j.jbusres.2022.03.037>
- \*Rizky, R., Lestari, E. P., & Wihadanto, A. (2024). Cyberloafing mechanism: The impact of workload, self-control, and job stress on civil servant performance. *JURNAL EKBIS*, 25(1), 809–825.

- \*Roy, I., Islam, R., & Sarwar, S. (2024). Impacts of transformational leadership on quiet quitting and cyberloafing: Exploring the role of emotional stability and work stress. *International Journal of Latest Research in Engineering and Management (IJLREM)*. <http://ijlrem.org/papers/v8i5/I85P1024.pdf>
- \*Salihoğlu, G. H. (2022). Cyberloafing in the context of bibliometric analysis. *Social Science Development Journal*, 7(34), 276–283.
- \*Sanchez, J. (2020). Perceived diversity, withdrawal, and cyberloafing: The role of organizational identification and social support [M.A., Wayne State University]. *ProQuest Dissertations & Theses Global*. <https://0-www.proquest.com.opac.lib.ntnu.edu.tw/dissertations-theses/perceived-diversity-withdrawal-cyberloafing-role/docview/2488711109/se-2?accountid=14228>
- \*Sao, R., Chandak, S., Patel, B., & Bhadade, P. (2020). Cyberloafing: Effects on employee job performance and behavior. *International Journal of Recent Technology and Engineering*, 8(5), 1509–1515.
- \*Sapkota, T., Pokhrel, S., & Pokhrel, L. (2024). Psychological entitlement and cyberloafing: Mediating role of perceived organizational justice among employees of Nepali commercial banks. *Journal of Business and Management Research*, 6(1–2), 18–31.
- \*Sarfray, M., & Khawaja, K. F. (2024). Is the internet a double-edged sword for organizations? An empirical study on cyberloafing. *Information Technology and Management*, 25(4), 319–333. <https://doi.org/10.1007/s10799-022-00385-5>
- \*Sari, E. Y. D., Muttaqiyathun, A., Widyrianto, L. A., Zahra, S. A., & Rahayu, S. S. (2024). Cyberloafing among government employees: Fact or fake? *Journal of Humanities and Social Sciences Research (AJHSSR)*, 8(8), 134–139.
- \*Sarioğlu Kemer, A., & Dedeşin Özcan, S. (2021). The dark side of technology: Cyberloafing, a Turkish study of nursing behaviour. *International Nursing Review*, 68(4), 453–460. <https://doi.org/10.1111/inr.12686>
- Sawitri, H. S. R. (2012). Interaksi tekanan pekerjaan dan komitmen pada perilaku cyberloafing karyawan. *Media Riset Bisnis & Manajemen*, 12(2), 91–107.
- \*Saxena, A., & Srivastava, S. (2023). Is cyberloafing an outcome of supervisor phubbing: Examining the roles of workplace ostracism and psychological detachment. *International Journal of Business Communication*. <https://doi.org/10.1177/23294884231172194>
- \*Seçkin, Z., Özdemir, Ş., & Tuncer, M. (2021). Analyzing the cyberloafing of the university employees with high burnout level. *İşletme*, 2(1), 1–17.
- \*Semiz, E., & Söyük, S. (2023). The relationship between work alienation behavior and cyberloafing: A study on healthcare professionals. *Çankırı Karatekin Üniversitesi İktisadi*

*ve İdari Bilimler Fakültesi Dergisi*, 13(4), 1381–1411.  
<https://doi.org/10.18074/ckuiibfd.1261920>

- \*Shaddiq, S., Haryono, S., Muafi, M., & Isfianadewi, D. (2021). Antecedents and consequences of cyberloafing in service provider industries: Industrial Revolution 4.0 and Society 5.0. *Journal of Asian Finance, Economics and Business*, 8(1), 157–167.  
<https://doi.org/10.13106/jafeb.2021.vol8.no1.157>
- \*Shahzadi, K., & Khurram, S. (2022). Determinants of employees' cyberloafing behaviour: A systematic literature review. *Journal of Development and Social Sciences*, 3(3), 150–161.
- \*Shaikh, Z. A., & Kumar, D. (2024). The investigation of moderating impact of cyberloafing on burnout and work engagement of private college faculty working in India. *African Journal of Biological Sciences*, 5(Si4), 3418–3427.  
<https://doi.org/10.48047/AFJBS.6.Si4.2024.3418-3427>
- \*She, Z., & Li, Q. (2023). When too little or too much hurts: Evidence for a curvilinear relationship between cyberloafing and task performance in public organizations. *Journal of Business Ethics*, 183(4), 1141–1158. <https://doi.org/10.1007/s10551-022-05038-9>
- \*Sijabat, R. (2021a). Comparative study of cyberloafing outcomes in male and female employees. *Management Analysis Journal*, 10(2), 186–197.
- \*Sijabat, R. (2021b). Differences of cyberloafing behavior outcomes on men and women employees. *Jurnal Administrasi Bisnis*, 10(2), 121–132.
- Sims, R. R. (1992). The challenge of ethical behavior in organizations. *Journal of Business Ethics*, 11(7), 505–513. <https://doi.org/10.1007/BF00881442>
- Şimşek, A., & Şimşek, E. (2019). Beneficial and detrimental effects of cyberloafing in the workplace. *Journal of Organizational Behavior Review*.
- Sipior, J. C., & Ward, B. T. (2002). A strategic response to the broad spectrum of internet abuse. *Information Systems Management*, 19(4), 71–79.  
<https://doi.org/10.1201/1078/43202.19.4.20020901/38837.9>
- \*Sığircıkoğlu, E. B., & Güğerçin, U. (2022). The role of perceived organizational justice and job satisfaction in municipality employees' cyberslacking behaviors. In *Handbook of Research on Current Trends in Asian Economics, Business, and Administration* (pp. 366–383). IGI Global. <https://www.igi-global.com/chapter/the-role-of-perceived-organizational-justice-and-job-satisfaction-in-municipality-employees-cyberslacking-behaviors/288931>
- \*Skeja, A., & Lorcu, F. (2022). Relation of three phenomena: Cyberloafing, creativity, and stress. In Kopacek P. (Ed.), *21st IFAC Conference on Technology, Culture and International Stability TECIS 2022* (Vol. 55, Issue 39, pp. 247–252). Elsevier B.V.  
<https://doi.org/10.1016/j.ifacol.2022.12.029>

- \*Soelton, M., Yuliantini, T., Karyatun, S., Arijanto, A., Anah, S., Aulia, I. N., Ummairoh, A., & Ali, A. J. (2024). How cyberloafing emerges: Burnout identification model approaches. *International Journal of Economics and Management Systems*, 9. [https://www.iaras.org/iaras/filedownloads/ijems/2024/007-0005\(2024\).pdf](https://www.iaras.org/iaras/filedownloads/ijems/2024/007-0005(2024).pdf)
- \*Song, M., Ugrin, J., Li, M., Wu, J., Guo, S., & Zhang, W. (2021). Do deterrence mechanisms reduce cyberloafing when it is an observed workplace norm? A moderated mediation model. *International Journal of Environmental Research and Public Health*, 18(13), 6751. <https://doi.org/10.3390/ijerph18136751>
- \*Soral, P., Arayankalam, J., & Pandey, J. (2020). The impact of ambivalent perception of bureaucratic structure on cyberloafing. *Australasian Journal of Information Systems*, 24, 1–44. <https://doi.org/10.3127/AJIS.V24I0.2087>
- \*Spath, S. A., & Vengrouskie, E. F. (2022). Manager’s lived experience in cyberloafing within business organizations. *International Journal of Management Science and Business Administration*, 8(3), 15–23.
- \*Spector, P. E. (2024). The dual nature of cyberloafing. *Applied Psychology*, 73(1), 502–505. <https://doi.org/10.1111/apps.12472>
- Stanton, J. (2000). Reactions to employee performance monitoring: Framework, review, and research directions. *Human Performance*, 13(1), 85–113.
- Statista. (2024a). Global digital population as of October 2024. *Statista*. Retrieved December 2, 2024, from <https://www.statista.com/statistics/617136/digital-population-worldwide/>
- Statista. (2024b). Share of adults worldwide using employer-issued devices for personal activities in 2022. *Statista*. Retrieved December 2, 2024, from <https://www.statista.com/statistics/1147849/share-adults-worldwide-employer-issued-device-personal-activities/>
- \*Suari, G. A. M. S., & Rahyuda, A. G. (2022). The effect of role ambiguity on cyberloafing with work stress as a mediation variable. *International Journal of Health Sciences*, 6(S4), 2211–2219. <https://doi.org/10.53730/ijhs.v6nS4.7145>
- \*Sulistyan, R. B., & Ermawati, E. (2020). Explaining cyberloafing behavior: The role of general strain theory. *Wiga: Jurnal Penelitian Ilmu Ekonomi*, 10(2), 148–156.
- \*Sunman, G. (2021). Intermediation role of job alienation in the relationship between job stress and cyberloafing behaviour. *Socrates Journal of Interdisciplinary Social Studies*, 13, 45–61.
- \*Suseno, G., & Saifudin, S. (2024). The influence of work-life balance, superior pressure, and cyberloafing on employee productivity: The moderating role of Islamic work ethic. *Journal of Islamic Economics Management and Business (JIEMB)*, 6(1), 1–22.

- \*Syahfudi, R., Suryatni, M., & Nurmayanti, S. (2023). The effect of workload and role conflict on job satisfaction moderated by cyberloafing in judges and clerks of religious courts on Lombok Island. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 7(12), 130–137.
- \*Syed, S., Singh, H., Thangaraju, S. K., Bakri, N. E., Hwa, K. Y., & Kusalavan, P. a/l. (2020). The impact of cyberloafing on employees' job performance: A review of literature. *Journal of Advances in Management Sciences & Information Systems*, 6, 16–28.
- Syrek, C. J., Kühnel, J., Vahle-Hinz, T., & Bloom, J. D. J. W. (2018). Share, like, Twitter, and connect: Ecological momentary assessment to examine the relationship between non-work social media use at work and work engagement. *Work & Stress*, 32(3), 209–227. <https://doi.org/10.1080/02678373.2017.1367736>
- \*Tageja, N., Mishra, D., Chaturvedi, V., & Rajput, N. (2024). What is behind cyberslacking? Investigating the effects of job stress and ethical climate at workplace. *International Journal of Public Sector Performance Management*, 14(3–4), 530–544. <https://doi.org/10.1504/IJPSPM.2024.142351>
- \*Tan, Z., Xia, Q., Yan, S., He, J., & Dong, J. (2024). How does negative work reflection impact cyberloafing? The chain-mediating effect of meaningful work and moral disengagement. *Current Psychology*, 43(29), 24678–24689. <https://doi.org/10.1007/s12144-024-06170-7>
- \*Tan, Z., Yan, S., & Xia, Q. (2023). Perceived overqualification and cyberloafing: The role of learning and performance climate. *Current Psychology*, 42(32), 28253–28262. <https://doi.org/10.1007/s12144-022-03913-2>
- Tandon, A., Dhir, A., Almugren, I., AlNemer, G. N., & Mäntymäki, M. (2021). Fear of missing out (FoMO) among social media users: A systematic literature review, synthesis and framework for future research. *Internet Research*, 31(3), 782–821.
- \*Tandon, A., Kaur, P., Ruparel, N., Islam, J. U., & Dhir, A. (2022). Cyberloafing and cyberslacking in the workplace: Systematic literature review of past achievements and future promises. *Internet Research*, 32(1), 55–89. <https://doi.org/10.1108/INTR-06-2020-0332>
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8(45), 1–10. <https://doi.org/10.1186/1471-2288-8-45>
- \*Tiwari, B., & Niraula, D. (2023). Cyberloafing, workplace incivility and employee productivity: An empirical study in rural municipalities of Kaski District. *The Batuk*, 9(2), 1–11.

- \*Tomolaju, O. P. (2024). Investigating the roles of workplace boredom, social influence, and organisational justice in cyberloafing among civil servants in Lagos State. *African Journal of Social and Behavioural Sciences*, 14(5).
- \*Tsai, H.-Y. (2023). Do you feel like being proactive today? How daily cyberloafing influences creativity and proactive behavior: The moderating roles of work environment. *Computers in Human Behavior*, 138, 107470. <https://doi.org/10.1016/j.chb.2022.107470>
- \*Uchegbu, I. C. (2024). Exploring the predictive interplay between cyberloafing behaviour, procrastination and mental health of nurses in Owerri Municipality. *African Journal of Social and Behavioural Sciences*, 14(1).  
<https://journals.aphriapub.com/index.php/AJSBS/article/view/2527>
- \*Ülbeği, İ. D. (2021). Cyberloafing in the workplace: A meta-analysis study. In *#Trending Topics on Social Media Researches* (pp. 161–176). Peter Lang AG.
- \*Ullah, S., & Imran, M. (2022). Reducing cyberloafing activities through meaningful work: Important role of affective commitment. *Pakistan Journal of Society, Education and Language (PJSEL)*, 9(1), 486–495.
- \*Ullah, S., Imran, M., & Khattak, S. R. (2022). Reducing cyberloafing behaviors among followers: Important roles of supervisor communication styles and meaningful work. *Journal of Management Research*, 8(2), 70–83.
- Uslu, O. (2025). Exploring the link between cyberloafing and work-related factors: A decade of systematic analysis. *Technology in Society* 83, 102997.  
<https://doi.org/10.1016/j.techsoc.2025.102997>
- \*Usman, M., Javed, U., Shoukat, A., & Bashir, N. A. (2021). Does meaningful work reduce cyberloafing? Important roles of affective commitment and leader-member exchange. *Behaviour & Information Technology*, 40(2), 206–220.
- \*van Bommel, W. (2020). The consequences of supervisor phubbing: Does supervisor phubbing lead to employee cyberloafing? [Unpublished manuscript].
- Vega, R. P., Anderson, A. J., & Kaplan, S. A. (2015). A within-person examination of the effects of telework. *Journal of Business and Psychology*, 30(2), 313–323.  
<https://doi.org/10.1007/s10869-014-9359-4>
- \*Venkatesh, V., Cheung, C. M. K., Davis, F. D., & Lee, Z. W. Y. (2023). Cyberslacking in the workplace: Antecedents and effects on job performance. *MIS Quarterly: Management Information Systems*, 47(1), 281–316. <https://doi.org/10.25300/MISQ/2022/14985>
- Venkatraman, S. (2008). *The "Darth" side of technology use: Cyberdeviant workplace behaviors* [Doctoral dissertation, University of South Florida].

- Vitak, J., Crouse, J., & Larose, R. (2011). Personal internet use at work: Understanding cyberslacking. *Computers in Human Behavior*, 27(5), 1751–1759. <https://doi.org/10.1016/j.chb.2011.03.002>
- \*Vrânceanu, D.-M., Țuclea, C.-E., Iorgulescu, M.-C., State, O., & Țală, M.-L. (2022). An investigation on cyberloafing behaviors: A multi-method analysis approach. *Economic Computation and Economic Cybernetics Studies and Research*, 56(4), 291–304. <https://doi.org/10.24818/18423264/56.4.22.18>
- \*Wang, R., Li, Z., Bu, C., & Zhu, W. (2023). Work connectivity behavior after-hours spills over to cyberloafing: The roles of motivation and workaholism. *Journal of Managerial Psychology*, 38(8), 597–610. <https://doi.org/10.1108/JMP-11-2022-0602>
- \*Wang, Y., Wang, J., & Liu, F. (2023). Study on the mechanism of the effect of leader pro-organizational unethical behavior on employee cyberloafing behavior. *Proceedings of the 2023 4th International Conference on Big Data and Social Sciences (ICBDSS 2023)*, 18–26. [https://doi.org/10.2991/978-94-6463-276-7\\_3](https://doi.org/10.2991/978-94-6463-276-7_3)
- \*Weerasooriya, W., & Rebecca, E. (2024). Impact of cyberloafing on job performance: Self-efficacy. *Journal of Human Resource Management Perspectives*, 9(1).
- \*Werner, J. (2020). *Investigating cyber-loafing in South African organisations: The role of theory of planned behaviour* [Doctoral dissertation, University of Cape Town]. <https://open.uct.ac.za/handle/11427/32527>
- \*Wiastuti, R. D., Prawira, O., & Yulianti, D. (2022). The influence of hotel employee job stress towards cyberloafing. *Journal of Indonesian Tourism, Hospitality and Recreation*, 5(1), 67–78. <https://doi.org/10.17509/jithor.v5i1.40494>
- \*Wibowo, P. (2024). Cyberloafing behavior: Perspective of job stress factors, transformative leadership, locus of control, and organizational commitment in Satker Y Central Java. *International Conference on Islamic Economics (ICIE)*, 1, 1351–1376. <https://proceeding.uingusdur.ac.id/index.php/icie/article/view/2619>
- \*Wijonarko, G., & Wirapraja, A. (2024). The influence of job stress, self-control, and organizational commitment on cyberloafing behavior among employees in Surabaya. *Jurnal Manajemen*, 15(2), 367–378.
- \*Wong, G. Y.-L., Kwok, R. C.-W., Zhang, S., Lai, G. C.-H., & Cheung, J. C.-F. (2023). Mutually complementary effects of cyberloafing and cyber-life-interruption on employee exhaustion. *Information and Management*, 60(2), 103752. <https://doi.org/10.1016/j.im.2022.103752>
- \*Wong, G. Y.-L., Lai, G. C.-H., Kwok, R. C.-W., & Cheung, J. C.-F. (2020). Synergy effect of cyber-life-interruption and cyberloafing on employee emotional exhaustion. *PACIS 2020 Proceedings: Pacific Asia Conference on Information Systems*, 31.

- \*Wu, J. N., Mei, W., Liu, L., & Ugrin, J. C. (2020). The bright and dark sides of social cyberloafing: Effects on employee mental health in China. *Journal of Business Research*, 112, 56–64. <https://doi.org/10.1016/j.jbusres.2020.02.043>
- \*Wu, J., Song, M., Ugrin, J. C., Liu, L., & Zhu, T. (2021). Cyberloafing research 1997–2019: A citation-based literature review. *Organizacija*, 54(2), 98–111. <https://doi.org/10.2478/orga-2021-0007>
- \*Wu, J., Song, M., Zoghbi-Manrique-de-Lara, P., Jiang, H., Guo, S., & Zhang, W. (2023). Why cyberloafing can be socially learned in the workplace: The role of employees' perceived certainty of formal and informal sanctions. *Information Technology and People*, 36(4), 1603–1625. <https://doi.org/10.1108/ITP-06-2021-0464>
- \*Yang, H., Lin, Z., Chen, X., & Peng, J. (2023). Workplace loneliness, ego depletion and cyberloafing: Can leader problem-focused interpersonal emotion management help? *Internet Research*, 33(4), 1473–1494. <https://doi.org/10.1108/INTR-01-2021-0007>
- \*Yang, W. (2023). Voice endorsement and cyberloafing: The role of relative deprivation and perceived over qualification. In *The 6th International Conference on Economic Management and Green Development (ICEMGD 2022)*, 3, 204–215. <https://doi.org/10.54254/2754-1169/3/2022787>
- \*Ye, H., & Qian, X. (2023). Facades of conformity and cyberloafing: A moderated mediation model. *Journal of Managerial Psychology*, 38(7), 480–495. <https://doi.org/10.1108/JMP-05-2022-0256>
- \*Yenita, Y., & Rahmadi, A. (2023). The impact of work stress on cyberloafing behaviour in travel company employees post COVID-19 pandemic with self-control as a mediating role. *International Journal of Application on Economics and Business*, 1(3), 1758–1768. <https://doi.org/10.24912/jjaeb.v1i3.1758-1768>
- \*Yildiz, H., & Yildiz, B. (2022). Testing the validity and reliability of a Turkish version of the Social Cyberloafing Scale. *Perspectives in Psychiatric Care*, 58(4), 1291–1302. <https://doi.org/10.1111/ppc.12930>
- \*Yildiz, H., & Yildiz, B. (2024). Effects of positive and negative cyberloafing on safety behaviors and occupational incidents during the COVID-19 pandemic: A Bayesian network analysis. *International Journal of Occupational Safety and Ergonomics*, 31(1), 248–257. <https://doi.org/10.1080/10803548.2024.2428569>
- \*Younas, F., Abbas, M., & Qayyum, S. (2023). What role perceived justice play between job boredom and cyber-loafing? A mediational inquiry of employees at software houses. *Journal of Professional & Applied Psychology*, 4(3), 352–364. <https://doi.org/10.52053/jpap.v4i3.218>

- \*Yu, Y.-C., Lee, C.-C., Chen, C.-C., & Lo, W.-C. (2021). Exploring the influence on military staff's cyberloafing to work performance from a cross level perspective. *International Journal of Innovation in Management*, 9(1), 25–36.
- \*Yui, T. C., Wu, C.-Y., & Kao, C.-C. (2021). Exploring the determinants of cyberloafing in the workplace: A conservation of resources (COR) perspective. *Ritsumeikan Journal of Asia Pacific Studies*, 39(01), 29.
- \*Yulianti, E., & Bagis, F. (2023). Effect of workloafing, cyberloafing and self efficacy on employee performance in Purwokerto Islamic Hospital. *Journal of Economics, Social, and Humanities*, 1(1). <https://ejournal.ump.ac.id/JESH/article/view/72>
- \*Yüncü, V., & Ağtaş, E. (2024). Sparking leadership and perceived organizational support as predictors of cyberloafing. *Управленец*, 15(4), 67–80.
- \*Zahmat Doost, E., & Zhang, W. (2024). The effect of social media use on job performance with moderating effects of cyberloafing and job complexity. *Information Technology and People*, 37(4), 1775–1801. <https://doi.org/10.1108/ITP-04-2022-0249>
- \*Zelong, D. (2023). The effect of workload, role ambiguity, and work environment on employee cyber-loafing behavior: Case study on Ming Yang Wind Power Group Limited, China. *Journal of Management Scholarship*. <https://doi.org/10.38198/JMS/2.1.2023.9>
- Zhang, J., Akhtar, M. N., Zhang, Y., & Sun, S. (2019). Are overqualified employees bad apples? A dual-pathway model of cyberloafing. *Internet Research*, 30(1), 289–313.
- \*Zhang, J., Akhtar, M. N., Zhang, Y., & Sun, S. (2020). Are overqualified employees bad apples? A dual-pathway model of cyberloafing. *Internet Research*, 30(1), 289–313. <https://doi.org/10.1108/INTR-10-2018-0469>
- \*Zhang, J., Xie, K., Zhang, Y., & Wang, Y. (2024). Unintended influence of leader forgiveness: Increased employee cyberloafing. *Management Decision*, 62(1), 107–128. <https://doi.org/10.1108/MD-10-2022-1426>
- \*Zhang, N., Liu, X., Li, J., & Xu, Z. (2023). The spillover effect of after-hours electronic communication on nurses' cyberloafing: The mediating role of psychological contract breach. *BMC Nursing*, 22(1). <https://doi.org/10.1186/s12912-023-01525-0>
- \*Zhang, Y., Wang, J., Akhtar, M. N., & Wang, Y. (2022). Authoritarian leadership and cyberloafing: A moderated mediation model of emotional exhaustion and power distance orientation. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1010845>
- \*Zhang, Y., Wang, J., Zhang, J., Wang, Y., & Akhtar, M. N. (2024). You have got a nerve: Examining the nexus between coworkers' cyberloafing and workplace incivility. *Internet Research*. <https://doi.org/10.1108/INTR-09-2022-0700>

- \*Zhong, J., Chen, Y., Yan, J., & Luo, J. (2022). The mixed blessing of cyberloafing on innovation performance during the COVID-19 pandemic. *Computers in Human Behavior*, 126, 106982. <https://doi.org/10.1016/j.chb.2021.106982>
- \*Zhou, B., Li, Y., Hai, M., Wang, W., & Niu, B. (2023). Challenge-hindrance stressors and cyberloafing: A perspective of resource conservation versus resource acquisition. *Current Psychology*, 42(2), 1172–1181. <https://doi.org/10.1007/s12144-021-01505-0>
- \*Zhou, Y., Chen, P., Liu, Q., & Wang, T. (2023). More haste, less speed: Leader bottom-line mentality and employee counterproductive social cyberloafing. *Journal of Managerial Psychology*, 38(8), 643–656. <https://doi.org/10.1108/JMP-02-2023-0078>
- \*Zhou, Z. E., Pindek, S., & Ray, E. J. (2022). Browsing away from rude emails: Effects of daily active and passive email incivility on employee cyberloafing. *Journal of Occupational Health Psychology*, 27(5), 503–515. <https://doi.org/10.1037/ocp0000325>
- \*Zhu, J., & Zhao, J. (2024). The U-shaped effect of responsible leadership on employees' cyberloafing. *South African Journal of Business Management*, 55(1). <https://doi.org/10.4102/sajbm.v55i1.4210>
- \*Zhu, J., Wei, H., Li, H., & Osburn, H. (2021). The paradoxical effect of responsible leadership on employee cyberloafing: A moderated mediation model. *Human Resource Development Quarterly*, 32(4), 597–624. <https://doi.org/10.1002/hrdq.21432>
- Zoghbi-Manrique-De-Lara, P. (2006). Fear in organizations: Does intimidation by formal punishment mediate the relationship between interactional justice and workplace internet deviance? *Journal of Managerial Psychology*, 21(6), 580–592.
- \*Zoghbi-Manrique-de-Lara, P. (2024). A commentary on Lim and Teo's (2022) review of cyberloafing: Further discussion on its concept and potential impact. *Applied Psychology*, 73(1), 490–494. <https://doi.org/10.1111/apps.12469>
- \*Zoghbi-Manrique-de-Lara, P., & Sharifiatashgah, M. (2021). The relationship between perceived crowding and cyberloafing in open offices at Iranian IT-based companies. *Cognition, Technology and Work*, 23(2), 331–342. <https://doi.org/10.1007/s10111-020-00627-y>
- \*Zoghbi-Manrique-de-Lara, P., Viera-Armas, M., & De Blasio García, G. (2020). Does supervisors' mindfulness keep employees from engaging in cyberloafing out of compassion at work? *Personnel Review*, 49(2), 670–687. <https://doi.org/10.1108/PR-12-2017-0384>
- \*Zubairi, A. A., Ramli, A. F., & Idris, R. (2024). Cyberloafing in the classroom: Unveiling its impact on teachers' work performance in Malacca. *Quantum Journal of Social Sciences and Humanities*, 5(6), 113–121.


\*Zubairi, A. A., Saravanan, S., Awang, F. D., Ali, N. W. M., Megat, P. F., & Suhaimi, R. I. (n.d.). *Digital drift: Unraveling impact of cyberloafing on job performance among service workers in the Klang Valley*. Retrieved March 24, 2025, from [https://www.researchgate.net/profile/Rashidin-Idris/publication/383870200\\_Digital\\_Drift\\_Unraveling\\_Impact\\_of\\_Cyberloafing\\_on\\_Job\\_Performance\\_among\\_Service\\_Workers\\_in\\_the\\_Klang\\_Valley/links/66deb9ddf84dd1716cde09f5/Digital-Drift-Unraveling-Impact-of-Cyberloafing-on-Job-Performance-among-Service-Workers-in-the-Klang-Valley.pdf](https://www.researchgate.net/profile/Rashidin-Idris/publication/383870200_Digital_Drift_Unraveling_Impact_of_Cyberloafing_on_Job_Performance_among_Service_Workers_in_the_Klang_Valley/links/66deb9ddf84dd1716cde09f5/Digital-Drift-Unraveling-Impact-of-Cyberloafing-on-Job-Performance-among-Service-Workers-in-the-Klang-Valley.pdf)



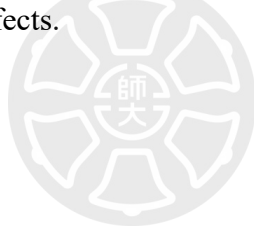
## APPENDIX A: SAMPLE OF CODED INCLUDED STUDIES

Search Date	Search Keyword	Data-base	Name of Journal	Research Title	Year Published	Authors	Fields Published	Study Type
2025-03-22	Cyberloafing	1	Ege Academic Review	The Role of Fear of Missing Out (FoMO) in the Relationship Between Personality Traits and Cyberloafing	2023	Özcan, H. M., & Koç, U.	1	1
2025-01-05	Cyberloafing	1	Public Administration Issues	Does Cyberloafing Affect Work Performance of the Civil Servants?	2024	Ab Razak, R., Rahman, N.H.A. and Kamil, N.L.M.	3	1
2025-01-30	Cyberloafing	1	Interdisciplinary Journal of Management Studies	Can Perceived Overqualification Increase Cyberloafing? An Emphasis on the Mediating Role of Emotional Exhaustion	2024	Harandi, A., & Mirzaeian Khamseh, P.	1	1

Definition	Antecedents	Mediator	Moderator	Outcome
Cyberloafing is the problematic internet use during working hours points and is considered among counterproductive behaviors (Blanchard and Henle, 2008).	Five-Factor Personality Traits	Fear of Missing Out		Cyberloafing
"Cyberloafing involves accessing personal matters and non-work-related activities during working hours, such as browsing e-sports, entertainment, online shopping, and other activities" (Ab Razak, Rahman, & Kamil, 2024, p. 91)	Cyberloafing			Work performance
Cyberloafing describes "web-based activities that do not match the job responsibilities of employees" (Koay & Soh, 2018; Harandi & Mirzaeian Khamseh, 2024, p. 410).	Perceived Overqualification	Emotional Exhaustion	Organizational Commitment	Cyberloafing

<b>Theoretical Lens Applied</b>	<b>Generational Difference Discussed</b>	<b>EPM Used</b>	<b>Ethical Implication of EPM</b>	<b>Sample Collection Period</b>	<b>Research Design</b>	<b>Geographical Focus</b>	<b>Prevalence of cyberloafing in post-pandemic era (statistics)</b>
Need to Belong Theory; Social Comparison Theory	2	2		1	3	5	
Theory of Planned Behavior	2	2		2	3	5	
Social Exchange Theory; The Conservation of Resources Theory; Person-Environment Fit Theory	2	2		2	3	5	

Employee Outcomes	Organizational Outcomes	Interventions	Organizational Policies	Future Research Directions
<p>1. Individuals with higher FoMO levels engaged more in cyberloafing.</p> <p>2. Conscientiousness negatively predicted cyberloafing, but this effect disappeared when FoMO was added as a mediator.</p> <p>3. FoMO had a full mediating effect between conscientiousness and cyberloafing.</p>		<p>1. Consider assessing FoMO during hiring, as FoMO has more predictive power on cyberloafing than personality traits alone.</p> <p>2. Provide psychological support for employees with high FoMO to reduce its negative effects.</p>		<p>1. Examine cyberloafing as part of human resources management and job performance.</p> <p>2. Examine FoMO in various issues in business management like organizational citizenship, organizational commitment, organizational culture, motivation, ethics, counterproductive work behaviors, job satisfaction, group dynamics, teamwork skills, leadership, organizational conflict, organizational stress and stress management, mobbing and absenteeism.</p> <p>3. Examine the employees working in different sectors.</p> <p>4. Perform qualitative research.</p> <p>5. Conduct research with experimental design in the future in order to reveal causal relationships more strongly.</p>



Employee Outcomes	Organizational Outcomes	Interventions	Organizational Policies	Future Research Directions
<p>Development behaviour significantly influenced task performance and adaptive performance, while deviant behavior is confirmed to have a significant impact on all three types of performance.</p>			<ol style="list-style-type: none"> <li>1. Revise existing policies and procedures related to internet usage for public sector organizations.</li> <li>2. Caution is recommended in considering any strict policy adjustments and improvements</li> </ol>	<ol style="list-style-type: none"> <li>1. Explore cyberloafing in the private sector.</li> <li>2. Comparing various public sectors worldwide implementing work-from-home (WFH) policies during the pandemic.</li> <li>3. Explore the relationships among cyberloafing, work performance, and psychological effects, offering solutions for the challenges associated with WFH policies in both the short and long term.</li> </ol>



<b>Employee Outcomes</b>	<b>Organizational Outcomes</b>	<b>Interventions</b>	<b>Organizational Policies</b>	<b>Future Research Directions</b>
Increased cyberloafing due to emotional exhaustion.		<ol style="list-style-type: none"> <li>1. Recommendations to clarify job requirements for employees and to improve employee psychological health and avoid emotional exhaustion.</li> <li>2. Recruit employees with a high organizational commitment to reduce cyberloafing.</li> <li>3. Reinforce the organizational identity and brand of the employer to reduce the perception of overqualification.</li> <li>4. Clarify emotional exhaustion, hold psychological and training meetings with employees.</li> <li>5. Stress organizational commitment in recruitment and implement measures to evaluate organizational commitment among recruitment candidates.</li> </ol>		<ol style="list-style-type: none"> <li>1. Incorporate harmonious passion, need for achievement, moral disengagement, and anger toward the organization as new variables into the model.</li> <li>2. Compare and analyze the findings to other industries against those in the oil industry.</li> <li>3. Examine in laboratory conditions before and after economic sanctions. Also, the role of sanctions and specific economic conditions in the effects of change on each other be evaluated and the results will be presented to economic policymakers.</li> <li>4. Exploit the equality theory to explain the findings of new variables</li> </ol>

## APPENDIX B: LIST OF THEORETICAL LENS

Theory	Frequency (n)	Theory	Frequency (n)
Conservation of Resources Theory	38	Role Theory	4
Social Exchange Theory	28	Self-Regulation Theory	4
Job Demands-Resources Model/Theory	13	Border Theory	3
Theory of Planned Behavior	13	Coping Theory	3
Social Learning Theory	11	Effort-Recovery Model	3
Social Cognitive Theory	10	Neutralization Theory	3
Self-Determination Theory	10	Organizational Justice Theory	3
General Strain Theory	10	Cognitive Appraisal Theory of Emotion	2
Ego-Depletion Theory	9	Differential Association Theory	2
Big Five Personality Theory	7	Job Characteristics Model	2
Equity Theory	6	Person-Job Fit Theory	2
Theory of Interpersonal Behavior	6	Relative Deprivation Theory	2
Affective Events Theory	5	Social Information Processing Theory	2
Counterproductive Work Behavior Framework	5	Transactional Theory Of Stress	2
General Deterrence Theory	5	Burnout Theory	2
Self-Control Theory	5	Transformational Leadership Theory	1

<b>Theory</b>	<b>Frequency (n)</b>	<b>Theory</b>	<b>Frequency (n)</b>
Adaptive Structuration Theory	1	Cyber Hygiene Theory	1
Attachment Theory	1	Cyberloafing Risk Assessment Models	1
Attribution Theory	1	Deductive And Inductive Theory Construction	1
Behavioral Automaticity Theory	1	Deterrence Rational Choice Theory	1
Behavioral Constraint Theory	1	Dual-Dimensional Framework of Cyberloafing	1
Challenge-Hindrane Stressor Framework	1	Dual-Pathway Cognitive-Emotional Perspective	1
Cognitive Appraisal Theory Of Stress	1	Dual-Process Theory	1
Cognitive Dissonance Theory	1	Dual-System Theory	1
Cognitive Load Theory	1	Effort-Reward Imbalance Theory	1
Cognitive-Affective Personality System	1	Emotion-Centered Model of Voluntary Work Behavior	1
Compensatory Internet Use Theory	1	Emotional Regulation Motives Framework	1
Componential Theory of Creativity	1	Expectancy Violations Theory	1
Containment Theory	1	Focus Theory of Normative Conduct	1

<b>Theory</b>	<b>Frequency (n)</b>	<b>Theory</b>	<b>Frequency (n)</b>
Grounded Theory	1	Kano Model	1
Herzberg'S Two-Factor Theory	1	Leader-Member Exchange Theory	1
Human Capital Theory	1	Maslach's Three-Dimensional Burnout Model	1
Individual Innovativeness Scale Framework	1	Mcclelland's Theory Of Needs	1
Information Processing Theory	1	Means-End Chain Theory	1
Interaction Of Person-Affect-Cognition-Execution Theory	1	Measurement Theory	1
Internet Flow Theory	1	Media Synchronicity Theory	1
Interpersonal Behavior Theory	1	Model Adapted from Khansa Et Al.	1
Job Crafting Theory	1	Moral Disengagement Framework	1
Job Embeddedness Theory	1	Moral Engagement Theory	1
Job Neglect Framework	1	Motivation-Ability-Opportunity Theory	1
Job Stress Process Model	1	Need To Belong Theory	1
Justice Theory	1	Operant Conditioning Theory	1

<b>Theory</b>	<b>Frequency (n)</b>	<b>Theory</b>	<b>Frequency (n)</b>
Organizational Commitment Theory	1	Self-Efficacy Theory	1
Organizational Support Theory	1	Social Bonding Theory	1
Performance Management Theories	1	Social Capital Theory	1
Person-Environment Fit Theory	1	Social Comparison Theory	1
Person-Organization Fit Theory	1	Social Identity Theory	1
Problem Behavior Theory	1	Social Identity Theory of Leadership	1
Push-Pull Theory	1	Social Norms Theory	1
Reactance Theory	1	Social Penetration Theory	1
Reciprocity Norm Theory	1	Social Resources Theory	1
Recovery Theory	1	Socioemotional Selectivity Theory	1
Routine Activity Theory	1	Strength Model of Self-Control	1
Self-Awareness Theory	1	Stress And Coping Theory	1
Self-Concept-Based Theory	1	Structuration Theory	1

<b>Theory</b>	<b>Frequency (n)</b>	<b>Theory</b>	<b>Frequency (n)</b>
Systems Model of Creativity	1	Triandis' Theory of Social Behavior	1
Technology Affordance Theory	1	Triandis' Theory of Interpersonal Behavior	1
Theory Of Compensatory Internet Use	1	Unitarism Theory	1
Theory Of Organizational Justice	1	Uses And Gratifications Theory	1
Total Quality Management	1	Work Stress Theory	1
Trait Activation Theory	1	Work-Home Resources Model	1
Trait Mindfulness Theory	1	Workplace Ostracism Theory	1
Trait-Based Behavioral Perspective	1		

## APPENDIX C: LIST OF ANTECEDENTS

Antecedent	Frequency (n)	Antecedent	Frequency (n)
Cyberloafing	70	Organizational Culture	3
Job Stress	16	Workplace Boredom	3
Workload	15	Person-Organization Fit	2
Self-Control	9	Challenge Stressors	2
Abusive Supervision	9	Loneliness	2
Organizational Commitment	8	Role Overload	2
Work Environment	6	Benefits	2
Organizational Justice	6	Descriptive Norms	2
Role Ambiguity	6	Procrastination	2
Perceived Overqualification	6	Hindrance Stressors	2
Job Satisfaction	5	Supervisor Phubbing	2
Role Conflict	5	Workplace Incivility	2
Work Stress	5	Work Alienation	2
Meaningful Work	4	Work-Life Balance	2
Workplace Ostracism	4	Transformational Leadership	2
Self-Efficacy	4	Job Burnout	2
Big Five Personality Traits	4	Psychological Entitlement	2
Locus of Control	3	Intrinsic Motivation	2
Burnout	3	Fear of COVID-19	2
Responsible Leadership	3	Interpersonal Conflict	2
Job Characteristics	3	Personality Traits	2
Job Overload	3	Extrinsic Motivation	2

<b>Antecedent</b>	<b>Frequency (n)</b>	<b>Antecedent</b>	<b>Frequency (n)</b>
Employee Perception of Their Job	1	Fear of Missing Out	1
Push Factors	1	Crowding Perceptions	1
Reactive Policy Development	1	Corporate Social Irresponsibility	1
Organizational Ethics Atmospheres	1	Procrastination Behavior	1
Distributive Justice	1	Injustice or Unfairness in the Organization	1
Procedural Justice	1	Psychological Contract	1
Interactional Justice	1	After-Hours Electronic Communication	1
Demographic Variables	1	Enterprise Social Media Use	1
Mastery Experience	1	Time Management Skills	1
Pull Factors	1	Perceived CSR Toward Employees	1
Frequency of WILB	1	Work Connectivity Behavior After-Hours	1
Vicarious Experience	1	Workplace Loneliness	1
Verbal Persuasion	1	Low Self-Esteem	1
Physiological/Affective States	1	Perceived Justice	1
Stress	1	Perceived Risk	1
Hustle Culture	1	Organizational Citizenship Behavior	1
Social Media Addiction	1	Workplace Negative Gossip Atmosphere	1
Ethical Values	1	Private Demand	1

<b>Antecedent</b>	<b>Frequency (n)</b>	<b>Antecedent</b>	<b>Frequency (n)</b>
Proactive Policy Development	1	Duration of WILB	1
Workplace Internet Leisure Browsing	1	Job Dissatisfaction	1
Rules And Regulations	1	Network Externality	1
Leader-Member Exchange	1	Illegitimate Tasks	1
Perceived Organizational Justice	1	Managerial Tools	1
Internet Addiction	1	Belief in Chaos	1
Voice Endorsement	1	Job Monotony	1
Negative Work-Home Interaction	1	Easy Internet Access	1
Negative Home-Work Interaction	1	Free Time	1
Positive Work-Home Interaction	1	Personality Trait Fatigue	1
Positive Home-Work Interaction	1	Autocratic Leadership	1
Observability	1	Leader Unethical Pro-Organizational Behavior	1
Self-Expression	1	Perception of Organizational Policy	1
Recognition	1	Occupational Future Time Perspective	1
Work-Family Conflict	1	Opportunities	1
Job Productivity	1	Personal Factors	1
Self-Awareness	1	Organizational Factors	1
Despotic Leadership	1	Family Incivility	1
Cyberslacking Behavior	1	Prescriptive Norms	1
Computer Security Posture	1	Stressor	1
Entrepreneurial Intention	1	Perceived Surface-Level Dissimilarity	1
Idiosyncratic Deals	1	Perceived Deep-Level Dissimilarity	1
Perceived Behavioral Control	1	Supervisor Communication Styles	1

<b>Antecedent</b>	<b>Frequency (n)</b>	<b>Antecedent</b>	<b>Frequency (n)</b>
Job Demands	1	Authoritarian Leadership	1
Demographic Factors	1	Social Influence	1
Work-life Balance	1	Sparkling Leadership	1
Social Networking Needs	1	Active Email Incivility	1
Perception of Others' Online Behavior	1	Work-Related Use of Information and Communication Technologies After Hours	1
Role of Pandemic	1	Perceived Internet Usage Policy	1
Leader Forgiveness	1	Perceived Computer Monitoring	1
Boredom at Work	1	Intolerance for Uncertainty	1
Pay Satisfaction	1	Empowering Leadership	1
Social Network Addiction	1	Personal Mobile-Internet Loafing	1
Position in The Organization	1	Logical Reasoning	1
Gender	1	Bossware and Artificial Intelligence Surveillance	1
Marital status	1	Remote Work	1
Penalties	1	Work-From-Home Setting	1
Social Factors	1	Remote Work Satisfaction	1
Affect	1	Remote Work Stress	1
Habit	1	Social Isolation	1
Intention	1	Cyber-Life Interruption	1
Facilitating conditions	1	Phubbing	1
Job satisfaction	1	Internet Monitoring	1
Satisfaction with the organization	1	Enterprise Social Media Usage	1
Self-efficacy in Accessing the Internet	1	Task Crafting	1

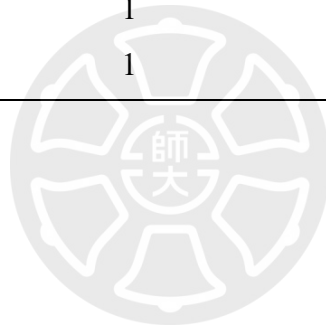
<b>Antecedent</b>	<b>Frequency (n)</b>	<b>Antecedent</b>	<b>Frequency (n)</b>
Time Management	1	Superior Pressure	1
Job Reattachment	1	Family Support	1
Passive Email Incivility	1	Work Support	1
Coercive Bureaucracy	1	Perceived Job Flexibility	1
Neuroticism	1	Work Practices	1
Openness to Experience	1	Task Significance	1
Agreeableness	1	Demographic Characteristics	1
Conscientiousness	1	Virtual Environment Habits	1
Technology Self-Efficacy	1	Social Media Use	1
Job Autonomy	1	Role of Conflict	1
Leader Bottom-Line Mentality	1	Emotional Exhaustion	1
Job Resources	1	Enabling Bureaucracy	1
Participative Leadership	1	Extraversion	1
Cyber-life-interruption	1	Digital Literacy	1
Telecommuting	1	Psychological Workload	1
Negative Work Reflection	1	Situational Inhibitors	1
Physical Workload	1	Personal Enablers	1
Zhong-Yong Thinking	1	Personal Inhibitors	1
Nursing Stressors	1	Supervisors' Mindfulness	1
Job Embeddedness	1	Followers' Mindfulness	1
Peer Abusive Supervision	1	Emotional Intelligence	1
Situational Enablers	1	Ego Depletion	1
Toxic Leadership	1	Creativity	1
Cognitive Demands	1	Facades of Conformity	1
Perceived Organizational Support	1	Enterprise Social Network Usage	1

## APPENDIX D: LIST OF MEDIATORS

Mediators	Frequency (n)	Mediators	Frequency (n)
Cyberloafing	12	Meaningful Work	1
Emotional Exhaustion	10	Employee Cynicism	1
Job Stress	4	Information Privacy Concerns	1
Job Satisfaction	4	Psychological Transition	1
Work Stress	4	Interruption Overload	1
Moral Disengagement	4	Fear of Missing Out	1
Work Engagement	4	Learning	1
Trust	2	Organization-Based Self-Esteem	1
Relative Deprivation	2	Workplace Ostracism	1
Affective Commitment	2	Sanction Concerns	1
Ego Depletion	2	Harmonious Passion	1
Negative Emotions	2	Job Engagement	1
Anger	2	Career Satisfaction	1
Organizational Identification	2	Hindrance Appraisal	1
Burnout	2	Challenge Appraisal	1
Psychological Contract Breach	2	Organizational Cynicism	1
Self-Efficacy	2	Mental Health	1
Felt Obligation	2	Workplace Boredom	1
Perceived Justice	1	Entertainment	1
Organizational Justice	1	Information Sharing	1
Dispositional Envy	1	Communication	1
Sense of Work Gain	1	Internet Addiction	1
Psychological Resilience	1	Moral disengagement	1
Cognitive Trust	1	Meaningful work	1

<b>Mediators</b>	<b>Frequency (n)</b>	<b>Mediators</b>	<b>Frequency (n)</b>
Perceived Insider Status	1	Stress	1
Mental Toughness	1	Emotional Conflict	1
Mindfulness	1	Job stress	1
Work-Related Negative Affect	1	Exhaustion	1
Perceived Stress	1	Work-Life Balance	1
Perceived Organizational Support	1	Intention to Engage in Cyberloafing	1
Anxiety	1	Organizational Commitment	1
Needs Satisfaction	1	Workplace Social Bonding	1
Emotional Stability	1	Psychological Capital	1
Workplace Anxiety	1	Fatigue	1
Relaxation	1	Psychological Detachment	1
Attentiveness	1	Job Embeddedness	1
Psychological Well-Being	1	Perceived Organizational Justice	1
Hedonic Motive	1	Empathic Concern	1
Eudaimonic Motive	1	Compassion at Work	1
Job Alienation	1	Anger Toward Organization	1
Experienced Compassion	1	Resources Sepletion Recovery	1
Perceived Norms	1	Role Ambiguity	1
Behavioral Automaticity Towards Cyberloafing	1	Organization-Based Self-Esteem	1
Psychological Distress	1	Job Crafting	1
Resilience	1	Social Media Context Awareness	1
Self-Control	1	Workplace Loneliness	1
Perceived Certainty of Formal and Informal Sanctions	1	Boredom at Work	1

<b>Mediators</b>	<b>Frequency (n)</b>
Remote Work Satisfaction	1
Perceived Organizational Punishment	1
Innovative Work Behavior	1
Third-Party's Negative Affectivity	1
Organizational Control	1
Conscientiousness	1
Attitude	1
Perceived Meaning of Work	1
State Gratitude	1
Job Anxiety	1
Motivation	1



## APPENDIX E: LIST OF MODERATORS

Moderator	Frequency (n)	Moderator	Frequency (n)
Cyberloafing	8	Autonomous Motivation	1
Organizational Commitment	5	Supervisor Developmental Feedback	1
Mindfulness	4	Leader Problem-Focused Interpersonal Emotion Management	1
Gender	3	Sustained Attention	1
Need for Achievement	2	Work-from-Home	1
Job Complexity	2	Organizational Identification	1
Power Distance	2	Metaphor of the Ledger	1
Work Stress	2	Stress Mindset	1
Moral Disengagement	2	Age	1
Conscientiousness	2	Job Security	1
Internet Addiction	2	Ethical Organizational Climate	1
Islamic Workplace Spirituality	2	Self-Efficacy	1
Moral Identity	2	Self-Control	1
Task Interdependence	2	Defense of Necessity	1
Leader-Member Exchange	2	Denial of Responsibility	1
Knowledge-Sharing Ability	1	Islamic Work Ethic	1
Job Experience	1	Communication Frequency	1
Fatigue	1	Communication Quality	1
Boredom	1	Goal Commitment	1
Islamic Spirituality	1	Work Locus of Control	1
Psychological Capital	1	Empathic Concern	1
Perceived Overqualification	1	Motivation	1
Perceived Ease of Technology Use	1	Job Control	1

<b>Moderator</b>	<b>Frequency (n)</b>	<b>Moderator</b>	<b>Frequency (n)</b>
Workaholism	1	Third-Party's Hostile Attribution Bias	1
Employee Needs for Relatedness	1	Co-Worker Interdependency	1
Ready-To-Resume	1	Work Environment	1
Conscientious Personality	1	Employee Conscientiousness	1
Joint Moderation	1	Digital Literacy	1
Negative Reciprocity Beliefs	1	Cyberslacking	1
Technostress	1	Time Management Skill	1
Trait Mindfulness	1	Cyber-Life Interruption	1
Perceived Severity of Sanctions	1	Trait mindfulness	1
Perceived Certainty of Sanctions	1	Performance–Avoidance Goal Orientation	1
Employee Motivation	1	Psychological Detachment	1
Emotional Exhaustion	1	Need for Power	1
Job Satisfaction	1	Performance Climate	1
Perceived Co-Worker Involvement	1	Harmonious Passion	1
Psychological Contract Breach	1	Creativity	1
Agreeableness	1	Power Distance Orientation	1
Social Support	1	Trait Prevention Focus	1
Cyber-life-interruption	1	Daily Workload	1

## APPENDIX F: LIST OF OUTCOMES

Outcomes	Frequency (n)	Outcomes	Frequency (n)
Cyberloafing	195	Perceived Productivity	1
Employee Performance	26	Burnout	1
Job Performance	13	Spiritual well-being	1
Employee Productivity	4	Creative Performance	1
Organizational Commitment	4	Employee Innovative Performance	1
Creativity	3	Cybersecurity Risk Level	1
Job Satisfaction	3	Workplace Incivility	1
Mental health	3	Task Performance	1
Work Performance	3	Quiet Quitting	1
Stress	2	Safety Behaviors	1
Individual Innovativeness	2	Occupational Incidents	1
Organizational Citizenship Behavior	2	Employee Engagement	1
Innovative Work Behavior	2	Employee Exhaustion	1
Work Engagement	2	Remote Work Satisfaction	1
Phubbing	1	Remote Work Performance	1
Job Engagement	1	Work Emotional Exhaustion	1
Teacher Performance	1	Nonwork Emotional Exhaustion	1
Compulsive Social Media Use	1	Internet Abuse Intention	1
Knowledge Hiding	1	Team Potency	1
Task Crafting	1	Team Conflict	1
Psychological Capital	1	Withdrawal	1
Teamwork Cohesion	1	Intrinsic Motivation	1

<b>Outcomes</b>	<b>Frequency (n)</b>	<b>Outcomes</b>	<b>Frequency (n)</b>
Extrinsic Motivation	1	Workplace Digital Transformation	1
Organizational Identification	1	Use of the Internet for relaxation	1
Internet Addiction	1	Use of the Internet for personal interests	1
Employee Self-Development	1	Job Conscientiousness	1
Daily Work Performance	1	Daily Proactive Behavior	1
Psychological Distress	1	Employee Well-Being	1
Innovation Performance	1		

