

Impact of Cyberloafing on Job Performance: Self-Efficacy

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Abstract: With the advancements in Communication technology, the state of the communications network has become considerably improved. When it comes to organizations, they are moving towards digitalization, and it leads to a rise in internet usage within the workplace. employees are misusing company-provided internet instead of using it for work-related tasks Therefore, the objective of the current study was to identify the impact of Cyberloafing on Job performance and the mediating effect of self-efficacy. This study intends to contribute to filling the empirical gap in the existing literature within the Sri Lankan context. Hence this was a quantitative and cross-sectional study which was based on an organization in IT industry employees. Data was collected through a structured questionnaire and 181 employees participated in this study. The data was analyzed by using Statistical Package for Social Sciences (SPSS). The analyzed results show that there is a significant negative impact of cyberloafing on job performance while there is a significant impact of self-efficacy as a mediator on the relationship between cyberloafing and job performance. Furthermore, this study is an initiative of organizational management with the support of supervisors and colleagues, to take necessary actions to reduce employee cyberloafing. It will increase productivity, efficiency and reduce time wastage within the organization, and improve job performance. Moreover, this study was limited only to one particular company in the IT industry in Sri Lanka. Therefore, the current study suggested that to conduct the study by considering all organizations in the business world within Sri Lanka to get an effective output from future research.

Key words: *Cyberloafing, Job Performance, Self-efficacy, Technology*

Background

Recent years have seen a rapid increase in technological development. With the advancements in Communication technology, the state of the communications network has become considerably improved (Chandak, 2020). When it comes to organizations, they are moving towards digitalization, and it leads to a rise in internet usage within the workplace (Chandak, 2020). The usage of the internet and social media by businesses today is unavoidable if they want to acquire a competitive edge and

respond quickly and effectively to customer requests (Chong, 2021). According to Koay (2018), businesses use the Internet to improve communication, increase employee productivity, and reach clients across the world. However, researchers have shown that employees are misusing company-provided internet instead of using it for work-related tasks (Bhadade et al., 2020) and that is called "Cyberloafing". According to Pindek et al. (2018), The term "cyberloafing" describes the practice of employees using the Internet for non-work-related or personal purposes while seeming to be working on official business during working hours. It involves accessing the



internet or digital devices for personal purposes, such as browsing social media, watching videos, playing games, shopping online, or engaging in other forms of online distractions, instead of focusing on their job responsibilities.

Most often, cyberloafing is seen in occupations that require extensive computer use (Shravan, 2022). Although a lot of scholars believe that computers are used in cyberloafing, (Askew, 2012) in his report says that it can also occur through cellphones and tablets as calls and messages also come in the sphere of cyberloafing. Other terms used to describe cyberloafing are non-work-related computing, online loafing, cyberslacking, internet deviance, problematic internet use, personal web usage at work, internet dependency, internet addiction disorder, cyber-bludging, and Internet abuse (Kim et al., 2011). Reports have indicated that employees often spend a significant amount of their time on non-work-related online activities and that is, about 60–80% of their time online at work is non-work-related, outweighing its benefits with disadvantages (e.g., productivity loss) (Kim et al., 2016). Fox (2007) argued that circumstantial pieces of evidence reveal that a small percentage of workers spend about six hours every day online while on the job.

Studies on cyberloafing have often implied that it leads to negative consequences in terms of work deviance and security threats (Bock et al., 2010). Some analysts believe that cyberloafing is simply a waste of time and bad for the organization. Lim, 2002). Cubed (2006) proposed that non-work-related online browsing and work delays cause productivity to decline and create financial loss for organizations. However, there are also possible positive consequences of cyberloafing applicable to recovery from work and activities related to work (Oravec, 2002). The use of

the Internet at work has been found in various studies to have a favorable direct association with employee satisfaction because it helps people rest at work, which boosts output and performance (Anandarajan et al., 2006).

There is a need for additional research in this field as a result of the inconsistent studies that have been published in the literature about the effects of social media and cyberloafing on workers' job performance. (Syed et al., 2020). According to Hussain and Parida (2017), although cyberloafing has become a growing trend among employees, this area of research has not been fully investigated. They emphasize the need for greater research to fully understand how cyberloafing affects employees' performance at work. Self-efficacy is one of the factors that significantly affect cyberloafing, according to Lee et al. (2007) and Gokcearslan et al. (2016). According to Bandura (2002), self-efficacy is an awareness that an individual possesses the abilities required to carry out an activity or achieve a goal. Employees generally do not want to reduce employee self-efficacy, but they may want to reduce their cyberloafing (Mercado et al., 2017). On the other hand, people with high levels of self-efficacy may believe they are good self-regulators and are therefore not cyber loaf (Prasad et al., 2010).

The research aims to address performance issues within an IT company, XYZ Company, identified during a first-quarter 2023 board meeting. The company experienced reduced team performance alongside increased internet usage in the past six months. Earlier infrastructure enhancements were implemented to boost overall efficiency. Concerned about the observed issues, the HR Department initiated a discreet investigation, revealing that employees were engaging in non-work-related activities such as browsing the internet, watching YouTube videos,

and using Facebook. The research's primary focus is on resolving these productivity challenges at XYZ Company. However, previous studies did not focus much on the impact of cyberloafing on employee Job performance in the IT industry. Also, there are only a limited number of studies on self-efficacy and cyberloafing (Korzynski, 2022). Therefore, this study will focus on the relationship between cyberloafing and job performance with the mediating effect of self-efficacy, to see how individual self-efficacy mediates cyberloafing activities and the job performance of employees who work in the XYZ company in Colombo, Sri Lanka.

Research Objectives

General Objectives

To assess the impact of cyberloafing on job performance and the mediating effect of self-efficacy on the relationship within the context of XYZ IT company.

Specific Objectives

To assess the impact of cyberloafing on job performance.
To assess the relationship between cyberloafing, Job performance and self-efficacy
To assess the impact of self-efficacy as a mediator in the relationship between cyberloafing and job performance.

Literature Review and Development of Hypothesis

Cyberloafing on Job Performance

Job performance explains the excellence of work carried out by an employee (Caillier, 2010). Research on cyberloafing has frequently suggested that it has negative impacts on security risks and job

deviance (Liu & Sun, 2010). There isn't much research done on the potential positive aspects of this behavior. Nonetheless, there may also be advantages to cyberloafing that apply to recovery from job and job-related activities (Oravec, 2002); Despite the fact that there hasn't been much actual research on how cyberloafing affects work performance, there are many theories in the literature (Askew, 2012). According to Lim and Chen (2009), social attitudes can be detrimental to productivity, thus employees should spend more time, effort, and mental resources cultivating their interpersonal relationships. Belanger and Van (2002) observed that taking a break from work while online can improve workers' performance when they return to their jobs. The authors headed on to explain that this happens because mental energy is depleted during task completion, and cyberloafing replenishes this energy, allowing workers to be more productive. They argued that although employees have specific tasks to complete, they also engage in cyberloafing during downtime. However, the success of the aforementioned perceptions has been uneven; various studies have discovered a modest association between the antecedents and cyberloafing, and the results have not always been consistent.

H1: There is a significant relationship between cyberloafing and job performance.

Self-Efficacy on Cyberloafing

There are only a limited number of studies on self-efficacy and cyberloafing. However, it has been stated that self-efficacy is likely to amplify the negative connection between self-regulation and cyberloafing because individuals who are high in self-efficacy perceive themselves to be good regulators and, therefore, do not cyberloaf (Prasad et al., 2010). For example, academic self-efficacy is

negatively correlated with excessive Internet use among college students (Odaci, 2011). If students develop a habit of turning to social media in the middle of complex tasks or when they are discouraged or bored, they may develop a tendency to withdraw from difficult cognitive tasks and give up or fail to exert enough effort to adequately conquer academic challenges (Hassell and Sukalich, 2016). Sawitri and Mayasari (2017) explored the moderating role of creative self-efficacy in inhibiting creativity through interactions with emailing, surfing, and leisure browsing activities. They suggested that the greater the creative self-efficacy of employees, the weaker the effects. Furthermore, leisure browsing and surfing activities were negatively associated with creativity.

H2: There is a significant negative relationship between self-efficacy and cyberloafing.

The Role of Self-Efficacy on Job Performance

According to Bandura (1986) and Locke & Latham (2004), self-efficacy beliefs are particular to a task or domain and have been proposed as a method of motivating improved performance. Judge et al. (2007) and Stajkovic and Luthans (1997) conducted two meta-analyses to look at the connection between self-efficacy and work-related performance. Task- or job-specific self-efficacy and work-related performance were shown to be significantly correlated (weighted average correlation of 0.38, reflecting a 28% performance gain in performance) in the 1998 meta-analysis, which comprised 114 research. This increase is at least twice as large as the effect size of similar constructs related to job motivation, like goal planning (Locke & Latham, 2004) or coaching and feedback (Kluger and DeNisi, 1996). However, the 2007 meta-

analysis by Judge et al., which included 186 studies (including the 114 earlier ones used in the Stajkovic & Luthans, 1998 study), discovered that the predictive validity of self-efficacy on work-related performance decreased by 67.4% when the influence of distal variables, such as general mental ability (GMA), personality, and experience, was taken into account. Consequently, the second meta-analysis verified advantages but was more circumspect in attributing significance, whereas the first meta-analysis discovered significant evidence and support for the association between self-efficacy and work-related performance. According to Randhawa's (2004) research, work performance and job-specific self-efficacy were found to be significantly positively correlated. This suggests that employees will perform better at work if they have higher job-specific self-efficacy.

H3: There is a significant positive relationship between self-efficacy and job performance.

The Role of Cyberloafing on Job Performance with the mediating role of Self-efficacy

According to Prasad et al. (2010), self-efficacy is the capacity of employees to view themselves as highly focused and having a clear understanding of their objectives. Bandura (1997) posited that such individuals have the greatest score on self-efficacy and have confidence that will do well on a given task. Additionally, these people can control stressful situations and have strong control over their attitudes and cognitions. According to Garrett and Danziger (2008), extreme levels of self-efficacy led to cyberloafing at work. In a similar vein, McCoy (2010) discovered that employees with high levels of self-efficacy are more proficient in technology and have higher levels of

computer self-efficacy. The same significant relationships between cyber laziness and self-efficacy were discovered by (Kim et al., 2012). According to Locke and Latham (1990), highly effective workers believe they are competent enough to control their efforts steadily over time by planning and moderating their behaviors. According to Cinar et al. (2015), cyberloafing in the management field is a current problem that calls for serious consideration and research in institutions in the public sector. It is suggested to combine some other factors with cyberloafing in order to comprehend its significance. Although previous investigations found a moderate positive correlation between these two variables (Prasad et al., 2010), research on self-efficacy and cyberloafing is lacking. The discussion above suggests that there are

conflicting views in the literature about cyberloafing and job performance, as well as between cyberloafing and self-efficacy. Based on the above facts and evidence, hypotheses are constructed as follows:

H4: Self-efficacy mediates the relation between cyberloafing and job performance.

Conceptual framework of the Study

Figure 01 illustrates the study's conceptual framework. The independent variable is cyberloafing; the dependent variable is job performance; and the mediating variable is self-efficacy.

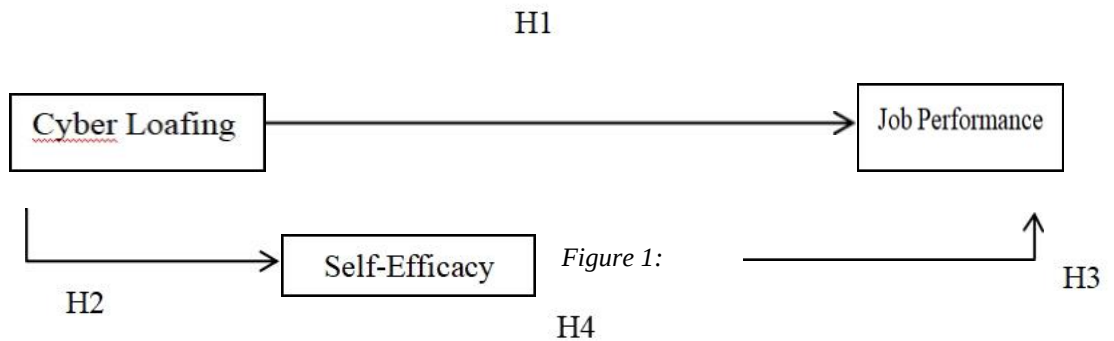


Figure 1: Conceptual Framework of the study

Source: Author (2023)

Research Design

Using a closed-ended questionnaire, a cross-sectional survey was used to gather the study's data. The questionnaire included eight items on self-efficacy, 18 items to assess job performance, and 12 items on cyberloafing. Additionally, the questionnaire was made to gather

respondent demographic data. The information was gathered from the Colombo, Sri Lanka-based XYZ IT company. Pre-tested scales from previous studies were used to collect responses on all research variables. The data were gathered by representing all the departments in the company for the period of three months period in 2024.

Population and the Sample

In the current study, the population is known to the author. The present study is about an IT company located in Colombo for the population of the study. As per the active list of employees in the organization, there are 500 employees currently working in the organization and all of them are taken as the population to conduct this study. In this study, the sample size is 218 and the confidence interval is 95%, according to the Morgan table. However, the sample size for this study is 181 participants. Then, this study applied convenience sampling method for data collection which helps in collecting data from any available respondents which is a convenient method of data collection.

Measurement Scales of Variables

The dependent variable: employee job performance was assessed using the measurement scale developed by Developed by Koopmans (2015) with 18 items. Reverse-coded items are included in the scale. All the items are anchored on a five-point Likert scale Sample items include: "I managed to plan my work so that I finished it on time", "I kept in mind the work result I needed to achieve".

The independent variable: To measure cyberloafing behavior, Lim & Teo (2005) five-point scale was used (1 = Never, 5 = Constantly) with 12 Items. 'Visiting adult websites' was one of the eliminated items because of low factor loadings. Sample items include, 'Visit non-job-related Websites', 'Visit entertainment-related Websites'.

The mediating variable: self-efficacy was assessed using the measurement scale

developed by Developed by Chen et al (2001) which includes 8 items. All the items are anchored on a five-point Likert scale where 1= Strongly Disagree 5=Strongly Agree. Sample items include: 'I will be able to achieve most of the goals that I have set for myself'. 'When facing difficult tasks, I am certain that I will accomplish them'.

Data Analysis Tools and Techniques

After being processed, the primary data were imported into SPSS for analysis. First, the Cronbach Alpha coefficient of internal consistency was used to confirm the scales' and the sample's reliability. Factor analysis and the KMO test were used to guarantee construct validity. To analyze each variable's unique behavior, descriptive statistics were created, and the dataset's multivariate assumptions were verified. Regression analysis and correlation analysis were used to examine the advanced hypotheses. Finally, the Sobel test was used to evaluate the mediator.

Data analysis and results

Reliability Statistics

The Cronbach's reliability test was used by the researcher to assess the internal consistency or reliability of the research constructs. According to scientific references, an adequate amount of internal consistency is present if the Cronbach Alpha value is higher than the alpha level of 0.70. In here the composite variables' Cronbach alpha coefficient of internal consistency is greater than 0.7. This indicates that there is an acceptable internal consistency among the items used in the questionnaire.

Table 1: Reliability Statistics

Variable	Cronbach alpha
Cyberloafing	0.912
Job performance	0.862
Self-efficacy	0.755

Source: Author, 2023

Validity Statistics

The KMO value should be greater than 0.7 and the significant value should be less than 0.005 to consider the measurement as

a valid instrument. According to the KMO coefficients and the respective sig. values for composite variables given in table 02, the study sample seems statistically adequate to perform an EFA to assess the construct validity.

Table 2: Validity Statistics

Variable	KMO Coefficient	Bartlett's Test [Chi-Square]	Sig.
Cyberloafing	.859	1301.779	0.000
Job Performance	.801	1356.468	0.000
Self-efficacy	.757	292.623	0.000

Source: Author, 2023

Correlation Analysis

According to table 3, it is observed that there exists a negative relationship

between Cyberloafing and Job Performance, as well as between Self-efficacy and Cyberloafing. Consequently, there is a moderate positive relationship between Self-efficacy and Job Performance.

Table 3: Summary of Correlation Analysis

Variables	Pearson Correlation	Relationship
Cyberloafing and Job Performance	-0.768 (Sig.000)	Strong negative correlation
Self-efficacy and Cyberloafing	-0.417 (Sig.000)	Moderate negative correlation
Self-efficacy and Job Performance	0.677 (Sig.000)	Moderate positive correlation

Source: SPSS output from field information

Regression Analysis

A regression analysis was carried out to investigate the impact (significance and the relationship) between the study variables. Table 2 demonstrates that SE

has a significant positive influence on JP where $\beta = 0.657$, $p < 0.05$, and CL has a negative influence on SE ($\beta = -.250$, $p < 0.05$). On the employees' level of JP, CL has a negative outcome ($\beta = -.448$, $p < 0.05$). Since every value is significant, the suggested hypotheses are accepted.

Table 4: Simple Regression Analysis

	β	t	$sig.$
CL & JP	-.448	-16.031	0.000
CL & SE	-.250	-6.139	0.000
SE & JP	.657	12.294	0.000

CL (cyber loafing), SE (Self Efficacy), JP (Job Performance)

Source: Author, 2023

Mediator Analysis

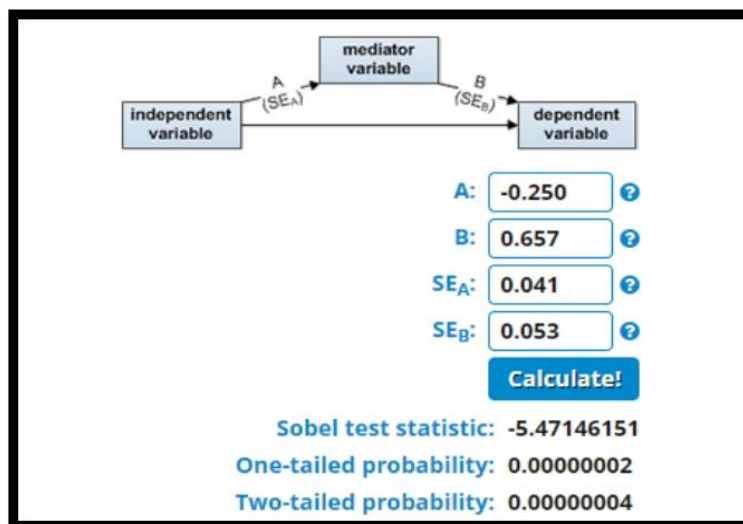


Figure 2: Sobel Test Results

Source: Online Sobel Calculator, 2023

The test statistic for the Sobel test is -5.471, with an associated p-value of 0.00000004 (at two-tailed probability). The fact that the observed p-value falls below

the established alpha level of 0.05 indicates that the association between cyberloafing (IV) and job performance (DV) is changed significantly by the inclusion of self-efficacy (MV) in the

model. In other words, there is evidence of a statistically significant mediation effect of self-efficacy on the relationship between cyberloafing and job performance.

Discussion of Findings

The objective of the current study was to identify the mediating effect of self-efficacy on the relationship between cyberloafing and job performance. Furthermore, this study intends to contribute to filling the empirical gap in the existing literature within IT industry in the Sri Lankan context. Hence this was a quantitative and cross-sectional study which was based on an organization in the IT industry and all levels of employees were selected for this study. Data were collected through a structured questionnaire using a convenient sampling technique representing all departments of the organization. Correlation analysis, simple regression analysis and Sobel test were used to measure the relationship and to test the advanced hypotheses of the study by using Statistical Package for Social Sciences (SPSS) and online calculators (Sobel test). The analysis results show that there is a significant negative impact between cyberloafing and job performance. As a mediator, self-efficacy has a significant impact on the relationship between cyberloafing and job performance. Accordingly, hypotheses are proposed; H1, H2, H3, and H4 are accepted. Furthermore, this study is an initiative of organizational management with the support of supervisors and colleagues, to take necessary actions to reduce employee cyberloafing. It will increase productivity, efficiency and reduce time wastage within the organization, and improve job performance. To do this, management must take action to create a supportive environment that increases employee self-efficacy while providing flexible working hours. Furthermore, this study was limited

to one specific company in the Sri Lankan IT industry. Therefore, the current study recommends that the study be conducted considering all organizations in the Sri Lankan business community in order to obtain valid results from future studies.

Implications and Recommendations

The current research paper acknowledges several limitations that warrant consideration for future investigations. Firstly, the findings may be context-specific to the particular IT company studied, limiting generalizability to other companies or industries with distinct organizational structures, cultures, or work processes. To enhance external validity, future studies could broaden their industry representation by including a diverse range of IT companies. Additionally, increasing the sample size, especially by incorporating more information technology companies, is recommended to improve the accuracy and precision of findings. To extend the applicability of the results, researchers might replicate the study in other industries, allowing for cross-industry comparisons. Furthermore, addressing the constraint of limited access to the survey population is crucial for obtaining a more representative sample. A mixed-methods approach, incorporating in-person interviews alongside questionnaires, can provide a more comprehensive understanding. One significant limitation identified is the lack of a longitudinal study design. Future research could benefit from adopting a longitudinal approach to explore how variables evolve over time, adding temporal depth to the understanding of relationships. Additionally, researchers may delve into qualitative exploration to uncover underlying factors and mechanisms, contributing to a more nuanced interpretation of findings. Lastly, validation studies and comparative

analyses across diverse organizational contexts could strengthen the generalizability of the research outcomes. Moreover, addressing these future directions can enrich the field's understanding and mitigate the limitations identified in the current study. It could be beneficial to investigate the potential impacts of age, job title, length of service, and education level on cyber-loafing as future developments. A considerable impact on cyberloafing activities may also be attributed to variables including team cohesiveness, role clarity, work motivation, and the quality of supervision. Finally, the current study suggests conducting more studies relevant to the current study area to fill the theoretical and empirical gap in the Sri Lankan context.

The phenomenon of cyber-loafing is interesting, and it is not surprising to find this (strong) statistical correlation. But more aspects than self-efficacy can be of importance, for instance, motivation, quality of supervision, role clarity, team cohesiveness, etc. One can imagine that if there is a committed work group, a member spending too much time on cyber-loafing should be corrected by team members.

Conclusion

The current study aimed to examine the impact of cyberloafing on job performance with the mediating effect of self-efficacy within XYZ Company in the IT industry located in Sri Lanka. Subsequently, it reflects that there is a strong negative relationship between cyberloafing and job performance and there is a significant effect from the mediating variable, self-efficacy. Moreover, the findings of this study emphasized that self-efficacy has a moderate negative relationship with cyberloafing and a moderate positive

relationship with job performance. Accordingly, it shows that when there is a high level of self-efficacy among employees, the less they are involved with cyberloafing activities in the organization. Conversely, in instances where the organization fails to foster a supportive work environment conducive to the enhancement of individual self-efficacy, there is a likelihood of cultivating a counterproductive workforce. The findings highlight the significance of creating a positive work atmosphere within the company that supports each employee's sense of self-efficacy. The idea behind this research area has significance not only for the information technology sector but also for all other corporate organizations that need to take cyberloafing and job performance into consideration in order to develop well-performing employees by fostering a supportive work environment. The study's limitations also indicate that it is restricted to a single IT industry organization. As a result, future research in this area should take into account the views of all employees in this industry as well as those in other industries. Furthermore, this study's method of gathering data is insufficient. Thus, more data collection techniques should be used for future research, according to the current study.

References

- Anandarajan, M., Paravastu, N., & Simmers, C. A. (2006). Perceptions of personal web usage in the workplace: AQ-methodology approach. *Cyber Psychology & Behavior*, 9(3), 325-335.
- Askew, K. (2012). *The relationship between cyberloafing and task performance and an examination of the theory of planned behavior as a model of cyberloafing*. University of South Florida.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology*, 51(2), 269-290.
- Belanger, F., & Van Slyke, C. (2002). Abuse or Learning? *Communications of the ACM*, 45(1), 64-65.
- Bock, G. W., Park, S. C., & Zhang, Y. (2010). Why employees do non-work-related computing in the workplace. *Journal of Computer Information Systems*, 50(3), 150-163.
- Caillier, J. G. (2010). Factors affecting job performance in public agencies. *Public Performance & Management Review*, 34(2), 139-165.
- Carter, W. R., Nesbit, P. L., Badham, R. J., Parker, S. K., & Sung, L.-K. (2018). The effects of employee engagement and self-efficacy on job performance: A longitudinal field study. *The International Journal of Human Resource Management*, 29(17), 2483-2502.
- Chandak, S., Sao, R., Patel, B., & Bhadade, P. (2020). Cyberloafing: Effects on employee job performance and behaviour. *International Journal of Recent Technology and Engineering*, 8(5), 1509-1515.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4(1), 62-83.
- Cinar, O., & Karcioğlu, F. (2015). The relationship between cyber loafing and organizational citizenship behavior: A survey study in Erzurum/Turkey. *Procedia-Social and Behavioral Sciences*, 207, 444-453.
- Cubed, Debt. (2006). Are your internet costs going through the roof. *Debt Cubed*, 21(1), 10.

- Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *Journal of Applied Psychology*, 90(6), 1241.
- Farooq, N. (2019). The relationship between cyber loafing and task performance and an examination of general self-efficacy as a mediator. *City University Research Journal*, 9(2).
- Fox, A. (2007). Caught in the web: Internet surfing takes on addictive qualities for some employees who may be hiding their abuse at work at a cost to both themselves and their employers. *HR Magazine*, 52(12), 34.
- Garrett, R. K., & Danziger, J. N. (2008). On cyberslacking: Workplace status and personal internet use at work. *Cyber Psychology & Behavior*, 11(3), 287-292.
- Gokcearslan, Ş., Mumcu, F. K., Haslamani, T., & Cevik, Y. D. (2016). Modelling smartphone addiction: The role of smartphone usage, self-regulation, general self-efficacy and cyberloafing in university students. *Computers in Human Behavior*, 63, 639-649.
- Hassell, M., & Sukalich, M. (2016). A deeper look into the complex relationship between social media use and academic outcomes and attitudes. *Information Research*, 32(7), 56-64.
- Hussain, S., & Parida, T. (2017). Exploring cyberloafing behavior in South-central Ethiopia: A close look at Madda Walabu University. *Journal of Media and Communication Studies*, 9(2), 10-16.
- Ibrahim, M., Yusra, Y., & Shah, N. U. (2022). Impact of social media addiction on work engagement and job performance. *Polish Journal of Management Studies*, 25(1), 179-192.
- Judge, T. A., Jackson, C. L., Shaw, J. C., Scott, B. A., & Rich, B. L. (2007). Self-efficacy and work-related performance: The integral role of individual differences. *Journal of Applied Psychology*, 92, 107-127.
- Kim, K., del Carmen Triana, M., Chung, K., & Oh, N. (2016). When do employees cyberloaf? An interactionist perspective examining personality, justice, and empowerment. *Human Resource Management*, 55(6), 1041-1058.
- Kim, S. J., & Byrne, S. (2011). Conceptualizing personal web usage in work contexts: A preliminary framework. *Computers in Human Behavior*, 27(6), 2271-2283.
- Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119, 254-284.

- Ko, K.-S., Lee, M.-J., & Kim, Y.-E. (2012). A research on addictive use of smartphone by university students. *Journal of Digital Contents Society*, 13(4), 501-516.
- Koay, K. Y. (2018). Workplace ostracism and cyberloafing: A moderated–mediation model. *Internet Research*, 28(4), 1122-1141.
- Korzynski, P., & Protsiuk, O. (2022). What leads to cyberloafing: The empirical study of workload, self-efficacy, time management skills, and mediating effect of job satisfaction. *Behaviour & Information Technology*, 1-12.
- Lee, Y., Lee, Z., & Kim, Y. (2007). Understanding personal web usage in organizations. *Journal of Organizational Computing and Electronic Commerce*, 17(1), 75-99.
- 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.
- Lim, V. K. (2002). The IT way of loafing on the job: Cyberloafing, neutralizing and organizational justice. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 23(5), 675-694.
- Lim, V. K. G., & Chen, D. J. Q. (2009). Cyberloafing at the workplace: Gain or drain on work? *Behaviour & Information Technology*, 25(1), 1-11.
- Lim, V. K., & Chen, D. J. (2012). Cyberloafing at the workplace: Gain or drain on work? *Behaviour & Information Technology*, 31(4), 343-353.
- Lim, V. K., & Teo, T. S. (2005). Prevalence, perceived seriousness, justification and regulation of cyberloafing in Singapore: An exploratory study. *Information & Management*, 42(8), 1081-1093.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Prentice-Hall, Inc.
- Maddux, J. E., & Stanley, M. A. (1986). Self-efficacy theory in contemporary psychology: An overview. *Journal of Social and Clinical Psychology*, 4(3), 249-255.
- McCoy, C. (2010). Perceived self-efficacy and technology proficiency in undergraduate college students. *Computers & Education*, 55(4), 1614-1617.
- Mercado, B. K., Giordano, C., & Dilchert, S. (2017). A meta-analytic investigation of cyberloafing. *Career Development International*, 22(5), 546-564.
- Odaci, H. (2011). Academic self-efficacy and academic procrastination as predictors of problematic internet use in university students. *Computers & Education*, 57(1), 1109-1113.

- Oravec, J. A. (2002). Constructive approaches to Internet recreation in the workplace. *Communications of the ACM*, 45(1), 60-63.
- Pindek, S., Krajcevska, A., & Spector, P. E. (2018). Cyberloafing as a coping mechanism: Dealing with workplace boredom. *Computers in Human Behavior*, 86, 147-152.
- Prasad, S., Lim, V. K., & Chen, D. J. (2010). Self-regulation, individual characteristics and cyberloafing.
- Ramos-Villagrasa, P. J., Barrada, J. R., Fernandez-del-Rio, E., & Koopmans, L. (2019). Assessing job performance using brief self-report scales: The case of the individual work performance questionnaire. *Revista de Psicología del Trabajo y de las Organizaciones*, 35(3), 195-205.
- Randhawa, G. (2004). Self-efficacy and work performance: An empirical study. *Indian Journal of Industrial Relations*, 336-346.
- Sao, R., Chandak, S., Patel, B., & Bhadade, P. (2020). Cyberloafing: Effects on employee job performance and behaviour. *International Journal of Recent Technology and Engineering*, 8(5), 1509-1515.
- Sawitri, H., & Mayasari, D. (2017). Keeping up with the cyberloafer: How do cyberloafing and creative self-efficacy bear with creativity? *Journal for Global Business Advancement*, 10(6), 652-670.
- Stajkovic, A. D., & Luthans, F. (1997). A meta-analysis of the effects of organizational behavior modification on task performance, 1975-95. *Academy of Management Journal*, 40, 1122-1149.
- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin*, 124, 240-261.
- Syed, S., Singh, H., Thangaraju, S. K., Bakri, N. E., & Hwa, K. Y. (2020). The impact of cyberloafing on employees' job performance: A review of literature. *Journal of Advances in Management Sciences & Information Systems*, 6, 16-28.
- 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.