CYBERLOAFING IN THE CLASSROOM: UNVEILING ITS IMPACT ON TEACHERS' WORK PERFORMANCE IN MALACCA

ZUBAIRI, A. A.[1*] – RAMLI, A. F.[1] – IDRIS, R.[1]

[1] *Department of Social Science, Universiti Selangor, Selangor, Malaysia.*

**Corresponding author*
e-mail: crashidin7[at]unisel.edu.my

(Received 24th July 2024; revised 21st October 2024; accepted 30th October 2024)

Abstract. The growing prevalence and increased usage of digital technologies nowadays especially in professional professions, notably educational settings, organisations are becoming increasingly concerned about cyberloafing. Thus, this research aims to study the relationship between cyberloafing behaviour and work performance among teachers in Malacca. Employing a quantitative research design, researchers use two instruments including Cyberloafing Scale to measure cyberloafing and The Individual Work Performance Questionnaire to measure work performance. 224 primary and secondary school teachers were recruited through a convenient sampling method. Data analysis encompasses both descriptive and inferential techniques, with computations facilitated through Statistical Package for Social Sciences (SPSS) version 27. The result of moderate positive correlation indicate there is a relationship between cyberloafing on work performance among teachers in Malacca. By addressing the relationship between cyberloafing and work performance among teachers in Malacca brings significant implications for academic institutions especially in terms of classroom demands, technology use and the balance between personal and professional obligations.
Keywords: *cyberloafing, work performance, education, teacher*

Introduction

The swift progression of technology has shown to be essential in providing customised answers to a range of requirements, improving the reach and effectiveness of routine activities. One significant change brought about by these developments is the increased incorporation and active use of electronic technologies in both work and learning environments. This transition in system indicates an important shift from previous generations by putting teachers and students in a situation where technology is essential to their daily interactions. Teachers and other professionals were forced to quickly adjust to these technological advances as a result of the pandemic's demands for remote learning and work-from-home situations, which highlighted the significance of digital technologies. According to Wang et al. (2021), working remotely seems to have become the "new normal" in a matter of time. This has further increased the utilisation of social media and the internet. Cyberloafing was one of the many issues that made the situation worse. The Education Act 1996 (Act 550) is the legislation that regulates education in Malaysia, it covers the establishment, management, and administration of educational institutions as well as the control of educational policies and practices. The Act has undergone numerous amendments to reflect the evolving demands of educational institutions. Nowadays, online Learning (OLL), a Moodle software, serves as the foundation for the e-learning that the institute offers and develops. Online learning is a popular method for database management and information distribution that may be used to manage, share, and facilitate learning activities (Taat and Francis, 2020). This indirectly gives teachers exposure to the use of technology where the filing and

education system is in align with today's educational needs along with technological advancement.

Therefore, this study was conducted to prove how far restrictions on cyberloafing will affect the quality and work performance of teachers. Given that teachers are a particularly vulnerable group when it comes to occupational burnout, it is suggested that it is important to identify the causes of teacher burnout as well as its corresponding environmental and personal factors. Sinar Harian (2023) stated The Malaysian teachers' union wants the Ministry of Education to ensure that any new digital tools or systems are beneficial to teachers, not cause the teachers excessive workloads, help in lessen the burden of work and promote improved working conditions for teachers. Thus, the teachers' union seeks to have greater involvement in how digital tools are developed and emphasizes how important it is to have a strong digital infrastructure to meet the needs of teachers (Idris et al., 2023).

Literature review

In today's digitally-driven era, technological progress has brought about various benefits and drawbacks in several aspects of life, including the professional and academic setting (Idris and Bacotang, 2023). One of the challenges that have arisen with the advancement of technology is the behaviour of "cyberloafing." This term refers to the act of employees or individuals who engage in non-work-related internet activities during work or study hours. The act of employees using their employer's Wi-Fi to send private emails and browse non-work-related websites is known as "cyberloafing" (Lim et. al., 2021). On the other hand, cyberloafing is defined as voluntary conduct that goes against key corporate policies and is considered to be negative to both individuals and organizations. Studies reveal that the negative effects of cyberloafing at places of employment and education include malware infection, procrastinating tasks, fear of losing secure network access, loss of productivity (Akar and Coskun, 2020). According to Erdogan et al. (2018), work performance is the term used to describe the duties carried out by people using their knowledge, skills, and talents in an organization's daily operations. On the other hand, work performance is the outcome of an individual's effort or dedication in completing a task assigned to the individual using knowledge, expertise, and sincerity in compliance with the duties that have been assigned (Niati et al., 2021). The qualities of the teachers influence both school development and teachers' work performance. It consist of an individual's commitment, expertise, and educational skills (Budhathoki, 2021). Performing well at work also entails fulfilling commitments and producing outcomes that the individual may be enthusiastic about (Asaloei et al., 2020). Work performance can be influence by various causes such as motivation, job demands, workloads, and deadlines. According to Khabri et al. (2023) teacher performance is affected by motivation and work stress. The performance of teacher can be enhance by having a good motivation since the motivation and performance are variables that are related to each other. A good performance is impacted by increased motivation at work, which can be a benefit of positive stress (Ramlawati et al., 2021).

Lim et al. (2021) stated cyberloafing is defined as an intentional action that violates significant organizational policies and is said to be harmful to both persons and organizations. Studies reveal that the negative effects of cyberloafing at places of employment and education include spyware infiltration, bandwidth filling, delaying tasks, and fear of losing network security, commercial privacy, lack of time spent, cost

to organizations, and less efficiency. Organizations are facing a significant problem from cyberloafing, which weakens security networks because employees may unintentionally open connections or visit obscure websites that could contain malware and infections (Hensel and Kacprzak, 2021). According to Akar and Coskun (2020), if control is provided, cyberloafing can occasionally inspire employees' creativeness, adaptability, and integrity, thus it shouldn't always be seen as negative. According to Koay et al. (2022) study, certain academics acknowledged that cyberloafing had advantages and can help workers, such as lowering stress levels related to their jobs. According to Agarwal and Avey (2020) cyberloafing is a coping mechanism for stress at work in which related to additional research that has examined several antecedents of cyberloafing, such as psychological capital, abusive supervision, and breaking of the psychological contract. According to Tsai (2023), while the majority of academics and professionals see cyberloafing as an unproductive work practice or a kind of workplace deviance, some scholars suggest that cyberloafing may actually enhance employee productivity (*Figure 1*).

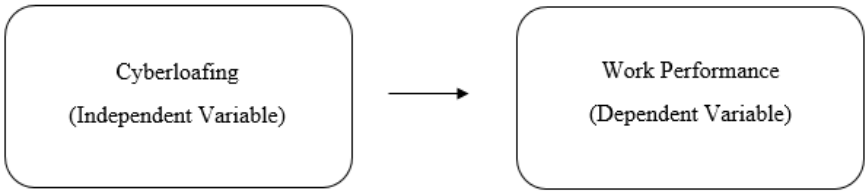

Figure 1. *Conceptual framework.*

Materials and Methods

Collecting and analysing numerical data is the process of conducting quantitative research (Bhandari, 2020a). As a result, the quantitative method used in this study is typical for correlational research. Correlational research is utilized to investigate possible correlations between study variables (Lau, 2017). The sample must be representative of the population to ensure that the result can be reliably and confidently generalized. Among the non-probability category sampling techniques is convenient sampling as used in this study. The sampling frequently utilized in education and social sciences besides cost-effective, less time-consuming, simple operation (Golzar et al., 2022). The population of teachers in Malacca is 13,892 reported in the Ministry of Education website. It refers to the selection of a subset of individuals from a larger population to provide data for research and draw conclusions. The total of the sample size is 224. The instrument of cyberloafing was taken from the scale of which was adapted to Turkish from Blanchard and Henle (2008) with the total of 22 items and consist of 5 factors which are sharing, shopping, real-time updating, accessing online content, and gaming/gambling. The instruments was evaluated and through an expert panel to address its applicability and comprehensiveness for the modern online behaviours observed within educational environment. Meanwhile work performance is evaluated using The Individual Work Performance Questionnaire (Koopmans et al., 2016) was developed with an 18-item Individual Work Performance Questionnaire to assess the three primary aspects of job performance which is task performance,

contextual performance, and counterproductive work behaviour. A 4-point rating scale (1=never to 4=always) for the task and contextual performance; and 1=never to 4=always for counterproductive work behaviour) is used for all items, and the recall span is three months.

Results and Discussion

This study aimed to determine how cyberloafing affected Malaccan teachers' work performance. The results have been divided into several distinct categories. Thus, this study aims to investigate the relationship between cyberloafing and work performance among teachers in Malacca. The main aspects of the dataset are summed up using descriptive analysis. This analysis consists of a summary of the respondents' ages, genders, and educational levels. There were 64 male responders, or 28.6% of the total, according to *Table 1*. In contrast, 160 (71.4%) of the respondents are female. Next, the respondents' age for this study range from 21 to 60 years old. According to the table, the respondents the 21-30 years old are 144 (64.3%), respondents in the age range of 31-40 years old is 8 (3.6%). Meanwhile, the respondents in the age range of 41-50 years old are 40 (17.9%) and some respondents that are 51-60 years old are 32 (14.3%). This study also summaries the number of respondents from each school involved in this study. As illustrated, the types of schools involved are primary school teachers and secondary school teachers. The frequency of primary school 124 (55.4%) while secondary school 100 (44.6%).

Table 1. *Demographic background.*

Category	Frequency (N)	Percentage (%)
Gender		
Male	64	28.6
Female	160	71.4
Age		
21-30	144	64.3
31-40	8	3.6
41-50	40	17.9
51-60	32	14.3
Type of school		
Primary	124	55.4
Secondary	100	44.6
Cyberloafing level		
Low	80	35.7
Moderate	112	50
High	32	14.3
Work performance level		
Low	48	21.4
Moderate	80	35.7
High	96	42.9

The distribution of cyberloafing levels among teachers in Malacca seen in *Table 1*. According to the research, half of the teachers (50%) participate in moderate amounts of cyberloafing, or using the internet for purposes other than work, during work hours. This indicates that, even while cyberloafing is not as severe as the high category, it may nonetheless have an adverse effect on student performance and productivity,

necessitating a balanced approach to its management. A significant percentage of teachers (35.7%) exhibit minimal cyberloafing, indicating efficient time management and concentration on work-related duties. For others, this group provides a favourable standard. On the other hand, a least percentage of teachers which is 14.3% shows a high levels of cyberloafing. Teachers in Malacca schools have a diverse distribution of work performance levels, according to the data. The highest group (42.9%), demonstrates high work performance. Nearly half of teachers are thriving in their positions and going above and beyond what is expected of them as a teacher. The next largest group (35.7%) exhibits moderate work performance level. More than one-third of teachers are operating at a level that is competent but not excellent. From the result, the teachers of the least group percentage (21.4%) showed a low level of work performance. This implies that a small percentage of the teaching personnel may be performing below expectations.

Inferential statistic

The inferential statistic specifically designed to enable conclusions from observed sample statistics to match population parameters, inferential statistical processes make use of the principles for statistical inference associated with a test of significance (Bhandari, 2020b). Pearson correlation was apply in this study to examine the relationship between cyberloafing and work performance among teachers in Malacca. The result of Pearson Correlation analysis shows in the *Table 2* administered to calculate the correlation between cyberloafing and work performance. The correlation coefficient (r) is 0.651, showing a moderate positive relationship between the two variables. The p-value of <0.001 represents that this correlation is statistically significant at a 2-tailed test. In this instance, it portray that work performance tends to increase as cyberloafing increases. This implies that teachers who spend more cyberloafing typically perform well in their jobs. Based on Sao et al. (2020), it is found that cyberloafing has a positive significant impact on all the behavioural factors such as generating new ideas, making a person more interesting at work, regaining span of attention, feeling excited and enthusiastic, and being productive at work.

***Table 2**. Pearson correlation analysis between cyberloafing and work performance aming teachers in Malacca.*

Category	Correlation coefficient	Sig. (2-tailed)	N
Cyberloafing	.651**	<.001	224

The findings of an in-depth study into the impact of cyberloafing on Malaccan teachers' job performance provide significant new insights into the complex links between these variables. The primary conclusions from the regression and descriptive analyses are examined in this discussion part, providing insight into the implications for the population of teachers in Malacca. Additionally, the purpose of the regression study is to determine whether there is a significant relationship between cyberloafing characteristics and teachers' work performance in that particular area. All five of the dependent variables which are sharing, shopping, real-time updates, online content access, gaming/gambling. Sharing, shopping, and real time update in cyberloafing factors shows statistically significant positive correlations with Work Performance. These correlations differ in strength; access online content has the highest correlation (R=.613), while sharing activity exhibits the lowest (R=.471). Each dependent variable

has a different amount of variation explained by Work Performance, even though all the models are statistically significant. With a percentage of variation explained of 37.6%, CL4 which access online content has the most significant while CL1 which is sharing activity has the lowest of (22.2%). In this instance, this indicate a positive relationship between two variables according to the findings. In the meaning of the cyberloafing level increases, the work performance also increase. Based on Sao et al. (2020), it is found that cyberloafing has a positive significant impact on all the behavioural factors such as generating new ideas, making a person more interesting at work, regaining span of attention, feeling excited and enthusiastic, and being productive at work. In the context of the workplace, cyberloafing is the practice of utilizing digital devices and the internet for non-job-related purposes while at work. This kind of time-wasting and distraction occurs in the workplace and usually includes utilizing personal email or texting, watching movies, playing games, buying online, and browsing social media.

Despite cyberloafing is sometimes seen negatively because it may distract workers from their work, research shows that, under some circumstances, it can also increase productivity among employees. Stokel-Walker (2020), although some organizations have strict policies and monitoring techniques in place to prevent cyberloafing, some organizations think that the temporary separation from work that results from loafing can allow employees to unwind for a momentarily, since this would improve outcomes with time. According to Ismail et al. (2021), cyberloafing has been shown to improve employees' creativity and ideas. Taking mental breaks through non-work-related internet activities might help employees come back to their jobs with new insights and ideas, which could improve their performance and productivity (Ismail et al., 2021). Their study support the findings of this research. Cyberloafing may significantly affect employee productivity, job effectiveness, and well-being. Sao et al. (2020) stated organizations should allow the use of the internet for recreational purposes as long as it is done in accordance with ethical standards or for instructional purposes. The results of the descriptive analysis showed that a sizable fraction of the sample engaged in low to moderate level of cyberloafing. Regardless of the level, all respondents acknowledged to cyberloafing during working hours. Furthermore, Güğerçin (2020) stated there is link in engaging in non-business activities while at work to technology-induced job stress based on the neutralization hypothesis. Employees may try to counteract the negative effects of technology-induced stress in this situation and feel justified in doing non-business tasks or engaging in other deviant behaviors. The findings supported the concept that workers utilize cyberloafing as a coping strategy at work (Andel et al., 2019). According to Batabyal and Bhal (2020) stated individuals may also use cyberloafing as a means of pursuing instant pleasure, such as balancing their personal and professional lives, finding entertainment, responding to social media enticements and unwinding feelings of boredom. These motivations for pleasure can likewise be claimed to be causes because of whereby individuals would regard cyberloafing as morally acceptable. Thus, according to Farivar and Richardson (2021) individuals who take quick breaks for cyberloafing may find themselves are more motivated and refreshed when they return to work, which can improve their focus on tasks.

Conclusion

The findings of this study reveal a moderate positive correlation between cyberloafing behavior and work performance among teachers in Malacca. These results

underscore the importance for academic institutions to carefully consider the impact of digital technologies on teachers' professional activities. Addressing the balance between classroom demands, technology use, and personal obligations is crucial for enhancing work performance while managing cyberloafing. The implications of this research are multifaceted and significant for various stakeholders in the educational sector. Firstly, academic institutions can use these findings to develop policies and guidelines that effectively manage the use of digital technologies within the classroom. By creating clear boundaries and expectations around technology use, schools can help teachers maintain focus on their professional responsibilities while minimizing opportunities for cyberloafing. Secondly, training programs that enhance teachers' digital literacy and time management skills can be beneficial. These programs can teach educators how to use technology efficiently for educational purposes while avoiding distractions that lead to cyberloafing.

Furthermore, schools may consider investing in monitoring tools and software that help track technology usage among teachers. This can provide valuable data to understand the extent of cyberloafing and devise strategies to reduce it without infringing on personal freedom and autonomy. Institutions can also focus on promoting a healthy work-life balance by encouraging practices that reduce stress and burnout among teachers, which can indirectly reduce the tendency to cyberloaf as a coping mechanism. Integrating topics related to digital discipline and responsible technology use into the teacher training curriculum can raise awareness and build competencies that mitigate the negative impacts of cyberloafing. Lastly, the study suggests that further research is needed to explore the nuances of cyberloafing across different educational contexts and among various demographics. Future studies can investigate the long-term effects of cyberloafing on work performance and develop comprehensive strategies to address this issue. By addressing the relationship between cyberloafing and work performance, this study highlights the need for a balanced approach to technology use in educational settings, which can enhance teachers' work performance and overall productivity, ultimately contributing to better educational outcomes.

Acknowledgement

We are deeply grateful for the support and welcoming research environment provided by Universiti Selangor (UNISEL). We also sincerely thank the staff members and associates whose steadfast cooperation and insightful advice made this endeavor feasible.

Conflict of interest

The authors confirm that there is no conflict of interest involve with any parties in this research study.

REFERENCES

[1] 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.

[2] Akar, I., Coskun, B.K. (2020): Exploring the relationship between creativity and cyberloafing of prospective teachers. – Thinking Skills and Creativity 38: 9p.
[3] Andel, S.A., Kessler, S.R., Pindek, S., Kleinman, G., Spector, P.E. (2019): Is cyberloafing more complex than we originally thought? Cyberloafing as a coping response to workplace aggression exposure. – Computers in Human Behavior 101: 124-130.
[4] Asaloei, S.I., Wolomasi, A.K., Werang, B.R. (2020): Work-Related stress and performance among primary school teachers. – International Journal of Evaluation and Research in Education 9(2): 352-358.
[5] 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.
[6] Bhandari, P. (2020a): What is quantitative research? – Scribbr Web Portal 6p.
[7] Bhandari, P. (2020b): Inferential statistics-An easy introduction & examples. – Scribbr Web Portal 16p.
[8] 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.
[9] Budhathoki, J.K. (2021): Teachers' satisfaction: Implications for job performance. – Interdisciplinary Research in Education 6(2): 79-88.
[10] Erdogan, B., Tomás, I., Valls, V., Gracia, F.J. (2018): Perceived overqualification, relative deprivation, and person-centric outcomes: The moderating role of career centrality. – Journal of Vocational Behavior 107: 233-245.
[11] Farivar, F., Richardson, J. (2021): Workplace digitalisation and work-nonwork satisfaction: the role of spillover social media. – Behaviour & Information Technology 40(8): 747-758.
[12] Golzar, J., Noor, S., Tajik, O. (2022): Convenience sampling. – International Journal of Education & Language Studies 1(2): 72-77.
[13] Güğerçin, U. (2020): Does techno-stress justify cyberslacking? An empirical study based on the neutralisation theory. – Behaviour & Information Technology 39(7): 824-836.
[14] Hensel, P.G., Kacprzak, A. (2021): Curbing cyberloafing: Studying general and specific deterrence effects with field evidence. – European Journal of Information Systems 30(2): 219-235.
[15] Idris, R., Bacotang, J. (2023): Exploring STEM education trends in Malaysia: Building a talent pool for Industrial revolution 4.0 and society 5.0. – International Journal of Academic Research in Progressive Education and Development 12(2): 381-393.
[16] Idris, R., Govindasamy, P., Nachiappan, S. (2023): Challenge and obstacles of STEM education in Malaysia. – International Journal of Academic Research in Business and Social Sciences 13(4): 820-828.
[17] 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.
[18] Khabri, I., Siregar, R.T., Romy, E. (2023): The influence of work environment and work stress on teacher performance with work motivation as an intervening variable in junior high school 6 banda aceh. – International Journal of Research and Review 10(8): 989-998.
[19] Koay, K.Y., Lim, V.K., 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): 10p.
[20] Koopmans, L., Bernaards, C.M., Hildebrandt, V.H., Lerner, D., de Vet, H.C., van der Beek, A.J. (2016): Cross-cultural adaptation of the individual work performance questionnaire. – Work 53(3): 609-619.

[21] Lau, F. (2017): Methods for correlational studies. In Handbook of ehealth evaluation: An evidence-based approach [internet]. – University of Victoria 9p.
[22] 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.
[23] Niati, D.R., Siregar, Z.M.E., Prayoga, Y. (2021): The effect of training on work performance and career development: the role of motivation as intervening variable. – Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences 4(2): 2385-2393.
[24] Ramlawati, R., Trisnawati, E., Yasin, N., Kurniawaty, K. (2021): External alternatives, job stress on job satisfaction and employee turnover intention. – Management Science Letters 11(2): 511-518.
[25] 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.
[26] Sinar Harian (2023): Aplikasi digital: Mudahkan urusan guru bukan tambah tekanan. – Sinar Harian Web Portal 11p.
[27] Stokel-Walker, C. (2020): Cyberloafing: The line between rejuvenating and wasting time. – BBC Web Portal 4p.
[28] Taat, M.S., Francis, A. (2020): Factors Influencing the Students' Acceptance of E-Learning at Teacher Education Institute: An Exploratory Study in Malaysia. – International Journal of Higher Education 9(1): 133-141.
[29] Tsai, H.Y. (2023): Do you feel like being proactive day? How daily cyberloafing influences creativity and proactive behavior: the moderating roles of work environment. – Computers in Human Behavior 138: 8p.
[30] Wang, B., Liu, Y., Qian, J., Parker, S.K. (2021): Achieving effective remote working during the COVID-19 pandemic: A work design perspective. – Applied Psychology 70(1): 16-59.