

The Effect of Workload, Role Ambiguity, and Work Environment on Employee Cyber-loafing Behavior: Case Study on Ming Yang Wind Power Group Limited, China

Du Zelong

Lincoln University College (LUC), Petaling Jaya, Malaysia

*E-mail: zelong_du@outlook.com

Received: 6th January 2023

Accepted for publication: 1st April 2023

Published: 27th June 2023

Abstract:

The purpose of this study is to investigate the effects of workload, role ambiguity, and work environment on the cyber-loafing behaviour of employees at Ming Yang Wind Power Group Limited. The study uses quantitative methods with data collection techniques through the distribution of questionnaires. The sample in this study is based on 150 employees of four selected Ming Yang Wind Power Group Limited using the random sampling method. The data analysis technique used is the multiple linear regression analysis using SPSS 20. The data analysis method used is the data quality test, classic assumption test, hypothesis test, and coefficient of determination (R^2). The results of this study indicate that workload, role Ambiguity, and work environment affect cyber-loafing behaviour simultaneously, and are significant towards the behaviour as indicated by the level of significance of $F < \alpha$ ($0,000 < 0.05$), with an adjusted R^2 of 0.32. This means that the contribution or weightage of workload, role ambiguity, and work environment toward cyber-loafing behaviour is 32%.

Keywords: Workload, work environment, Cyberloafing, ambiguity, behaviour

Introduction

Today, the internet has become an inseparable part of human life. Research conducted by The State Council Information Office Republic of China, in 2021 stated that the number of internet users in the Republic of China is about 1.05 billion people accessing to internet in China with a total population of 1.4 billion people. Where the composition of the majority of Internet users is workers and entrepreneurs with a total of 82.2 billion, which is 78.2% of all Internet users (Palash, 2021). Workers can access the internet wherever they are without exception in the organization where they work.

The existence of computers and internet facilities in organizations helps employees complete their tasks effectively and efficiently, enhances employee creativity, and helps define services to the community based on modern technologies, thereby saving organizational time and expenses (Nisaurrahmadani in Ardilasari and Firmanto, 2017). The positive aspects of internet use in the education Department itself are a means of communication between divisions, sending files via email, finding information, accessing employee data through official sites, and so on.

However, the internet can also have negative effects on the organization. Internet users may neglect their obligations in carrying out their duties. A story by Kompasiana writes: Abuse of Department internet connections during working hours is a culture in society. Not only in Malaysia but in developed countries such as the United States, China, India, Britain, and even Japan, though well known for its 'disciplined' people, there are still frequent internet abuses in Departments (Kompasiana, 2015). The existence of the Internet for employees seems to be a distinct advantage. In addition to being an efficient business

tool, the Internet also provides access to employees to the largest information ‘playground’ in the world (Ardilasari and Firmanto, 2017).

Employees access the Internet during working hours not for the benefit of the organization they work for, but to avoid assignments and eliminate boredom (Lim and Hunik, 2012). The technology used when accessing the internet can come from a company or private property that employees carry while working (for example a smartphone, iPad, or laptop). When Internet access has become commonplace, the tendency of employees to use the Internet unrelated to their work increases, which is commonly called cyberloafing (Blanchard and Henle, 2008).

Briefly defined, cyber-loafing is an internet usage activity that is related to employee hobbies and various other entertainments during working hours (Permatasari, 2010). Examples such as accessing social sites (Facebook, Instagram, Twitter), reading news, sending and receiving personal e-mail, online games, online shopping, watching videos, downloading files or music, and other activities that have nothing to do with work and assignments.

Cyber-loafing behaviour can be attributed to the presence of work stress (role ambiguity, role conflicts, role overload). Role Ambiguity is doubts about what actions should be taken to complete a job. Role conflict is the need to do things differently. Role overload is an organization's request to do work within a given time (Lim in Herdiati et al., 2015).

Likewise, according to Conlin (in Permatasari, 2010), cyberloafing behaviour is caused by a stressful workplace. Stress can lead to role Ambiguity (unclear purpose and lack of guidelines), role conflicts (conflicts with coworkers, supervisors, and workgroups), and role overload (workload that exceeds ability). Cyberloafing behaviour is also caused by situational factors namely the physical distance between employees and their superiors (Ardilasari and Firmanto, 2017).

Employees in government organizations tend to experience job stress easily because of routine and regular work such as keying data carefully and making and compiling archives or letters quickly and neatly, in a crowded workspace. These working conditions or demands can trigger work stress; therefore, to deal with stress and space in such intensive workplaces and conditions, employees tend to commit cyber-loafing.

In this study, the object of this research was the employees of Ming Yang Wind Power Group Limited. The researcher chose the Ming Yang Wind Power Group Limited as a research place because it used a computerized system that was connected to the internet in carrying out its work in all sub-sections. Ming Yang Wind Power Group Limited is the largest private wind turbine manufacturer in China and the fifth largest overall in the country. The company was listed on the New York Stock Exchange from 1 October 2010 to June 22, 2016. It is developing the world's largest wind turbine with a capacity of 18 MW.

The company focuses on designing, manufacturing, selling, and servicing megawatt-class wind turbines. Ming Yang cooperates with Aerodyne Energy Systems GmbH, a wind turbine and rotor blade engineering company based in Germany. Ming Yang's key customers include the five largest state-owned power producers in China, with an aggregate installed capacity accounting for more than 5.5% of China's newly installed capacity in 2010. The company started wind turbine production in 2007, with a prototype of 1.5 MW designed by Aerodyne. In 2010, Ming Yang started SCD production (2.75MW and 3.0MW). The SCD (Super Compact Drive) is an innovative two-blade turbine by Aerodyne. In 2013, the new offshore SCD 6.5 wind turbine was presented. A two-bladed downwind offshore turbine with a helicopter deck. The first was connected to the grid in 2015. Larger models are expected, and 12 MW is under development. In 2011, Ming Yang ranked among the top 4 wind turbine suppliers in China and top 10 worldwide. Mingyang won a bid for 87 MW (29 * 3 MW) two-bladed offshore wind turbines near Zhuhai in 2013. In 2022, MingYang received orders for 1 GW of three-bladed 11 MW hybrid-drive wind turbines for Chinese offshore by 2023.

Workplaces have partitions that divide an employee and other employees to be more focused on their respective work. The distance of the partitions is quite narrow and makes files pile up on the worktable, which creates cyber-loafing behaviour by accessing news and social media at the time working hours. At the location of this study, there is wifi with a fairly good access speed, and employees can use their mobile phones connected to the internet both during rest periods and working hours.

In today's world, cyber-loafing is changing into more and more of a problem. The word, therefore, knows that no definition for it exists within the Oxford English dictionary. However, in line with the urban dictionary, it's the “norm” for 21st Century workers. Cyber-loafing, additionally called cyber-slacking, consists of exploiting the organization's internet for private tasks like chatting, email, shopping, etc. The increasing use of the internet has modified the method we live and work. Moreover, in countries wherever there's a use of the web on an oversized scale, changes within the content and context of labour are ascertained. The utilization of the web has become a tool to meet a competitive advantage by organizations. Also, it's been related to several negative consequences like reduced employee productivity. Despite its importance, there are cyber-loafing studies in Asian countries.

The paper proposes a changed version of Triandis's theory of social behaviour by incorporating a replacement variable, the flexibility to cover cyber-loafing that directly predicts workers cyber-loafing. This paper additionally recommends examining the connection between cyber-loafing and employees' productivity. Some studies believe that cyber-loafing is useful for employees' productivity however different studies to recommend that it's harmful to employees' productivity. By understanding what causes cyber-loafing and its impacts, organizations are more practical in managing the difficulty. So, it's necessary to analyze to search out the most factors in employee cyber-loafing behavior and recommend ways to overcome the matter of cyber-loafing. This study is very important as a result if the matter isn't resolved it's going to cause issues for the organization and workers in the future. This study aims to search out the connection and effects of workload, role ambiguity, and work environment on employee cyber-loafing behaviour by Ming Yang Wind Power Group Limited.

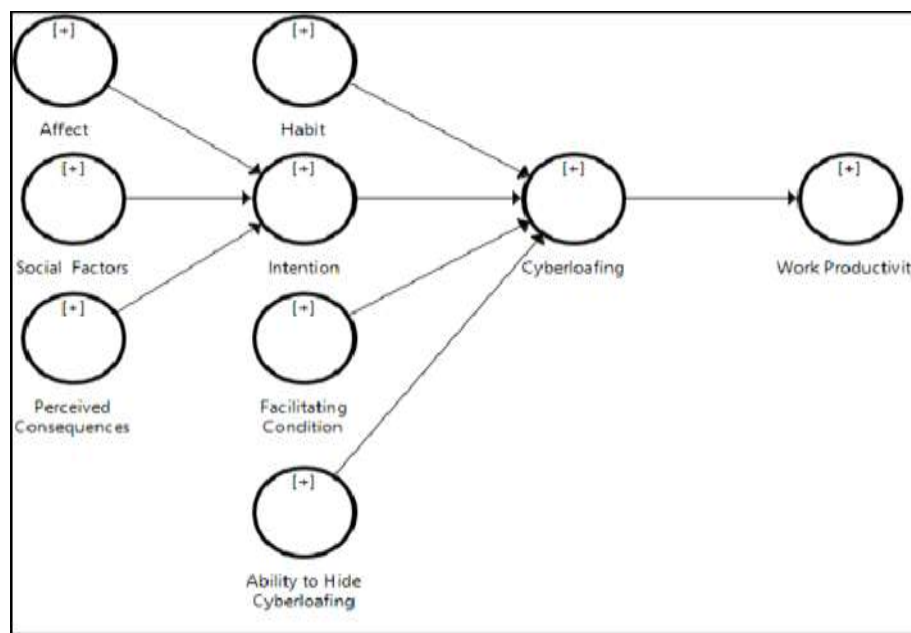


Figure 1: Research Framework

Research Objectives

From the formulation of the problem, this research was conducted with the aim of:

1. To analyze the effects of workload on cyber-loafing behaviour of employees at Ming Yang Wind Power Group Limited.
2. To analyze the effects of role ambiguity on cyber-loafing behaviours of employees at Ming Yang Wind Power Group Limited.
3. To analyze the effects of the work environment on the cyber-loafing behaviours of employees at Ming Yang Wind Power Group Limited

Research Methodology and Data Analysis

The population is a generalized area consisting of subjects and objects that have certain qualities, and characteristics determined by researchers to be studied, and then conclusions drawn (Sugiyono, 2016). Whereas according to Uma Sekaran (2015), the population is the whole group of people, events, or things that researchers want to investigate. The number of collections can be a little to a lot, from tens to hundreds of millions. The population in this study was collected from four Ming Yang Wind Power Group Limited which consists of 150 employees.

Othman (2011) affirms that the research sample is the subset of the research population that enables the researcher to reach a conclusion based on findings. (Polit et al 2001) define a sample as “a proportion of a population”. Sampling refers to the selection of a subset of persons or things from a larger population, also known as a sampling frame (Scott & Morrison, 2007), to represent the particular population (Gall et al., 2007; Neuman, 2011). Cohen et.al (2007) explained that the research sample should be selected systematically as it represents the research population and its data will be used to generate a conclusion, statement, or even decision on a particular organization.

Babbie (2007) added that sample size also will determine the cost incurred during the conduct of the research. Othman (2011) affirmed that the right sample size will only be determined when the researcher states the specific margin of error and a desired confidence interval in the data. As such, before determining the research sample size, the researcher must determine the specific margin of error and the desired confidence. A common definition of margin of error is a summary of sampling error which quantifies uncertainty about a survey result. The three things that seem to affect the margin of error are sample size, the type of sampling done, and the size of the population.

Since the research population of this study is 150 employees working in Ming Yang Wind Power Group Limited, by using the formula developed by Krejcie and Morgan (1970) as shown in Table 3.1, the researcher had identified a total of 150 respondents as the research sample size. Furthermore, the research sample has met the requirement of a minimum sample which is 100 needed to execute regression analysis (Schumacker& Lomax, 2004).

The researcher used a questionnaire as a tool for data collection. The administration of the questionnaire was conducted in stages due to the availability of the respondents. To facilitate the data collection and to increase the return rate of the

questionnaire respondents, the researcher conducted a direct meet-up with the representatives of the respondent. This is because the researcher had limitations and difficulty to meet the whole 150 respondents that had been identified. The researcher handed out the questionnaire personally to the representative for distribution and requested the return of it within two weeks from the day of its distribution. To monitor the progress of the survey and to ensure the maximization of the returned questionnaire, the researcher had made followed up twice with the representative of the respondents. According to (Vogt (2007), a researcher should make follow up with respondents to secure a high return rate for the research questionnaires and as well as to guarantee a high quality of data collection. After the due date that was agreed upon, a total of 150 questionnaires were collected. The return rate of the questionnaires was 100 percent based on the total of 150 sets of questionnaires distributed. This rate is considered high as the researcher had taken more than one follow-up as a countermeasure as well as due to the cooperation given by the representative involved in this research. Table 3.1 shows the response received from respondents regarding the survey questionnaire.

Table 1: Respondent's Response to Survey Questionnaire

Detail	N	%
Number of questionnaires distributed	150	100.0
The number of questionnaires returned	150	100.0
Number of questionnaires unreturned	0	0
Number of questionnaires uncompleted	0	0
Number of questionnaires used in research	150	100.0

For this study, as mentioned earlier, the researcher will utilize a set questionnaire as an instrument that will be answered by the respondents individually. The said questionnaire consists of three parts that include demographic information, workload, role ambiguity, work environment, and cyber-loafing which have 32 items in total. The components of the questionnaire items are shown in Table 2.-.

Table 2: Number of Items in the Questionnaire

No	Section	Number of Items	Source
1	A: Demographic Information	5	Demography
2	B: Workload	5	Workload Febri (2015)
3	C: Role Ambiguity	5	Role Ambiguity Herdiyati et al. (2015)
4	D: Work Environment	7	Work Environment (Sedarmayanti in Riydi, (2012)
5	E: Cyber-loafing	10	Cyber-loafing Behaviour Blanchard and Henle (2008)
Total of items		32	

Overall, the questionnaire as an instrument of this research consists of 32 items, which take no more than 10 minutes to answer. Section A in this questionnaire used a nominal scale whereas else for Sections B, C, D, and E used an ordinal scale which is the Likert 5-point scale whereby number 1 represents the statement "Strongly Agree", number 2 refers to "Agree", number 3 represents "Neutral", number 4 refers to "Disagree" and finally number 5 represents a statement "Strongly Disagree".Babbie (2007) suggests that the Likert scale is most suitable to measure questionnaire responses from the respondents.

Findings and Interpretation

The researcher had determined three objectives namely, to identify the level, relationship, and influence between the variables to be discussed in this particular research. The results derived from descriptive analysis which utilized mean and standard deviation, Pearson Correlation Test, and Linear Regression Analysis with the “Enter” method show that the said objectives were successfully attained. Therefore, further discussion will focus on these objectives and their hypothesis testing.

Objective 1: To analyze the effects of workload on cyber-loafing behaviour of employees at Ming Yang Wind Power Group Limited

To identify the level of workload among the employee of Ming Yang Wind Power Group Limited, the researcher used descriptive analysis to raise the question “Does the workload affect the cyber-loafing behaviour of employees at Ming Yang Wind Power Group Limited?” Overall, based on descriptive analysis which utilized mean and standard deviation, the research findings show that, overall, the respondents assess workload at a low level (mean = 2.7280, SD = 0.61405) meanwhile cyber-loafing too scored a medium level of influence among the respondent at (mean = 3.5247, SD = 0.57099.)

Objective 2: To analyze the effects of role Ambiguity on cyber-loafing behaviours of employees at Ming Yang Wind Power Group Limited

In this particular objective, the researcher had intended to answer the research question about the relationship and the influence between an independent variable and dependent variable which is “Does the role ambiguity affect the cyber-loafing behaviour of employees at Ming Yang Wind Power Group Limited?” To answer this question, the researcher conducted inferential statistical analysis such as the Pearson correlation test and linear regression analysis with the “Enter” method on a predefined hypothesis. The result of the Pearson correlation test for the relationship between variable role ambiguity and cyber-loafing shows a value of p for cyber-loafing is 0.218 and the r value for cyber-loafing is -0.064.

Although the results show a negative and significant relationship between the two variables, as the value of significance is low, the researcher concluded that role ambiguity plays a minor role in determining the cyber-loafing of the respondents. At the same time, the result of linear regression analysis also shows role ambiguity has only a slightly significant influence on cyber-loafing with the value $R = 0.064a$ and $R^2 = 0.004$. Therefore, the researcher has concluded that role ambiguity has a very minimal significant influence to determine the cyber-loafing of the employees in Ming Yang Wind Power Group Limited.

This finding also mentions that Role Ambiguity is a gap between the amount of information a person has and what he needs to be able to carry out his role appropriately (Brief et al. In Syukri, 2017). Therefore, role Ambiguity is a stress generator because it can prevent individuals from doing their jobs and cause feelings of insecurity and uncertainty.

Objective 3: To analyze the effects of the work environment on cyber-loafing behaviours of employees at Ming Yang Wind Power Group Limited.

To clarify this objective, the researcher raised a question about the relationship and the influence of the work environment on cyber-loafing which is “Does the work environment affect the cyber-loafing behaviour of employees at Ming Yang Wind Power Group Limited?” The analysis findings based on the Pearson correlation test show that the value of p for the cyber-loafing is 0.051 and the r value for cyber-loafing is 0.134 whereby it implies that there is a positive and a significant relationship between the work environment and cyber-loafing. Since the value of significance indicates a high and strong relationship, the researcher concluded that the work environment plays a major strong role in determining the cyber-loafing of the respondents. Moreover, the result of linear regression analysis shows that the work environment has a significant influence on cyber-loafing R-value as 0.134a and R^2 as 0.018. This finding is in line with the work environment is one of the factors that can affect employees’ performance. Employees will be able to carry out their activities well if supported by an appropriate, healthy, safe, and comfortable environmental condition. Non-conformity can require more energy and time and does not support an efficient work system. (Alex S Nitsemto 2000) defines the work environment as everything that is around the workers who can influence themselves in carrying out the tasks assigned.

Conclusion

The findings based on the feedback received from the respondent who is currently working in Ming Yang Wind Power Group Limited reveal that most of them are still on the average level in cyber-loafing behaviour. As such, it is wise for Ming Yang Wind Power Group Limited to identify and draw up potential countermeasures that could be taken to decrease the cyber-loafing behaviour among the staff for better productivity. The following are recommendations from the researcher based on her readings, observation, and understanding: -

- i. For a better organizational culture, the Ming Yang Wind Power Group Limited must reward the employee for their hard work by setting an amount of time in the workday for their tasks implementing this, allows the employee to de-stress and get back to work with a fresh mind.
- ii. Organizations should implement monitoring systems on their computers to screen for employees that are using the internet for personal tasks.
- iii. The organization should come out with enforcing a policy regarding using the internet for personal use and for employees to understand that there is a chance of them being caught and how severe the consequences could be.

Research indicates that because it becomes more difficult for individuals to separate their work and home lives, the two spheres generally overlap and cyber-loafing usually happens. As Ivarsson and Larsson (2011) state, its presence within the workplace could also be less of a problem than employers tend to think it's. In certain things, cyber-loafing will give a type of recovery that's useful to the worker, and so to the organization.

However, a newer study done by Lim and Chen, challenges the previous findings "by showing that email activities (i.e., minor cyber-loafing) have a negative impact on employees' work, whereas browsing activities have a positive impact" (Zoghbi-Manriquez-de-Lara, 2012). Since there are totally different findings, it's arduous to place a finger on once precisely cyber-loafing is counterproductive. On top of that, (Ugrin and Pearson 2013) recommend that there are numerous preventative measures that ought to be taken to make sure that your staff has gotten their job is done which it's correct. In most cases, organizations try and implement observation systems on their computers to screen for staff that is using the web for private tasks. However, the difficulty with this is often that not everybody views personal net use at work as being a nasty issue. If someone doesn't believe they're doing something wrong, they're going to not accept the observation system as a punishment or let it sway them from checking the most recent sports scores to achieve organizational goals (Bass & Riggio, 2006).

Reference

- Abidin, Rahimi, & Sobry, C. (2014). The relationship of cyberloafing behavior with big five personality traits. *Australian Journal of Basic and Applied Sciences*, 1-24.
- Akbar, S., & TJ James, P. (n.d.). Consumers' Attitude Towards Online Shopping: Factors Influencing Employees of Crazy Domains to Shop Online. *Journal of Management and Marketing Research*, 1-11.
- C. Ugrin, J., & J., M. P. (2008). Cyber-Slacking: Self-Control, Prior Behavior and The Impact of Deterrence Measures. *Business Information Systems*, 1-15.
- Hernández, W., Levy, Y., & M. Ramim, M. (2016). An empirical assessment of employee cyberslacking in the public sector: The social engineering threat. *Journal of Applied Knowledge Management*, 1-17.
- Ince, M., & Gul, H. (2011). The Relation of Cyber Slacking Behaviors with Various Organizational Outputs: Example of Karamanoglu Mehmetbey University. *European Journal of Scientific Research*, 1-21.
- Jandaghi, G., Alvani, S. M., & Matin, H. Z. (2015). Cyberloafing Management in Organizations. *Iranian Journal of Management Studies*, 1-15.
- K.G. Lim, V., & J.Q. Chen, D. (2012). Cyberloafing at the workplace: gain or drain on work? *Behaviour & Information Technology*, 1-12.
- Lima, Y. J., Osman, A., & Salahuddinc, S. N. (2016). Factors Influencing Online Shopping Behavior: The Mediating Role of Purchase Intention. *Procedia Economics and Finance*, 1-10.
- Lo, H.-Y., & Harvey, N. (2012). Effects of shopping addiction on consumer decision-making: Web-based studies in real-time. *Journal of Behavioral Addictions*, 1-10.
- Palash, G. (4 February, 2021). China Now Has Almost 1 billion Internet Users. Retrieved from Forbes: <http://www.forbes.com>
- Polat, G. (2012). Cyberloafing Phenomenon in Organization: Determinants and Impacts. *International Journal Of e-business and e-government Studies*, 1-15.
- Ramadhan, V. A., & Diah Sari, E. Y. (2018). Perilaku Cyberloafing pada Pekerja Perempuan. *Jurnal Psikologi Integratif*, 1-12.
- S Shergill, G., & Chen, Z. (2005). Web-Based Shopping: Consumers' Attitudes Towards Online. *Journal of Electronic Commerce Research*, 1-16.
- S. H. TEO, T. (2002). Attitudes toward online shopping and the. *Behaviour & Information Technology*, 1-14.
- Saleh, M., Daqqa, I., & Abdu, M. B. (2018). The effect of cyberloafing on employee productivity. *International Journal of Advanced and Applied Sciences*, 1-6.
- Varol, F., & Yildirim, E. (2018). An Examination of Cyberloafing Behaviors in Classrooms from Students' Perspectives. *Turkish Online Journal of Qualitative Inquiry*, 1-21.