Antecedents and Consequences of Cyberloafing in Service Provider Industries: Industrial Revolution 4.0 and Society 5.0
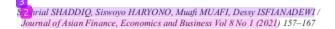
by Dessy Isfianadewi

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Antecedents and Consequences of Cyberloafing in Service Provider Industries: Industrial Revolution 4.0 and Society 5.0

Syahrial SHADDIQ[1], Siswoyo HARYONO[2], Muafi MUAFI[3], Dessy ISFIANADEWI[4]

Abstract

Cyberloafing is activity deviation at the workplace where employees intentionally avoid doing their job during working hours that results in a decrease in productivity. Particularly in the context of this study, cyberloafing activity is the usage of the Internet while working. Yet, studies on the antecedents and consequences of cyberloafing in the context of industrial revolution 4.0 and society 5.0 have not been conducted. This research used a purposive convenient sampling of 280 employees in the business services branches in Indonesia, particularly the representative business service branches located in some cities and regencies, including Yogyakarta City, Sleman Regency, and Bantul Regency (Special Region of Yogyakarta) and its surroundings. The results show 3 antecedents of cyberloafing and 1 consequence of cyberloafing which influence each other. Furthermore, these findings have filled the existing gaps regarding the antecedents and consequences of cyberloafing in service provider industries in the context of industrial revolution 4.0 and society 5.0. From the results of this research, it can be concluded that the five hypotheses proposed in this study are supported. The antecedents and consequences of cyberloafing have been tested and proven in this study as a contribution to science and technology.

Keywords: Cyberloafing, Industrial Revolution 4.0, Society 5.0, Job Performance, Service Provider Industry

JEL Classification Code: D20, D22, D23, M12, M15

1. Introduction

Cyberloafing is classified as a productivity deviation in the workplace where the employees deliberately avoid doing work during working hours (Lim, 2002). Cyberloafing is routine deviant behavior in the workplace that has the potential to threaten security (Luo et al., 2019). The term 'cyberloafing' was coined by Vivien Lim in 2002. Cyberloafing is often considered a counterproductive type of withdrawal behavior (Andel et al., 2019). It is considered more dangerous than expected, as it gives the false impression that the employees performing well and increase security risks and litigation for companies. Thus, it is not surprising then that this behavior is prevalent and increases during working hours, i.e. during lunch break, at school, and in an individual's free time (Korunovska & Spiekermann, 2019).

The critical issue in this research is the importance of discussing cyberloafing comprehensively. This phenomenon arose in the world since the advent of electronic devices and Internet media. Some countries even decided to invest excessively in high-speed Internet with large bandwidth for government organizations and state companies. For example, the Poland government decided to invest in high-speed Internet, e-government, the social consensus for digital, and technology support. Poland has a plan that 70% of the home will use broadband Internet till 2015 and all home will use till 2020 (Kim & Seo, 2020). Social media also plays an important role in almost all industrial sectors, one of which is in the economic sector. Social media data, such as Facebook and Twitter, play a critical role as a company's decision-making tool, rather than just a simple communication tool,
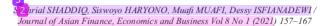
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which is, establishing and supporting relationships between people (Park & Javed, 2020). However, many people access social media just for fun and entertainment rather than using it effectively for their job.

The second theoretical issue in this research is the importance of examining various theories related to cyberloafing in the industrial revolution 4.0. Computer interaction with humans or human-computer interaction (HCI) has become common in industrial revolution 4.0. Computers (electronic calculating machines) in today's context vary from personal computers (PCs), laptops, tablets, notebooks, devices, etc. (Nguyen & Luu, 2020). The theory of planned behavior (TPB) states that subjective norms, attitudes toward behavior, and perceived behavior control cause deviations (Ajzen, 1991).

After reviewing the preceding literature, previous researchers found that the adoption of TPB is the most relevant theory for approaching and studying cyberloafing (Askew et al., 2014). TPB, as applied to cyberloafing, states that cyberloafing is caused by three antecedents, i.e.: subjective social norms (descriptive norms), cyberloafing attitudes, and self-efficacy (confidence) in accessing the web (Internet), which is mediated through the intention to engage in cyberloafing (Askew et al., 2014; Sheikh, Atashgah, & Adibzadegan, 2015; Holguin, 2016). There are two broad types of norms: what others do (descriptive norms) and what others say are acceptable norms (prescriptive norms) (Park & Smith, 2007).

The second antecedent of cyberloafing is the attitude of cyberloafing. The attitude of cyberloafing is an act committed by employees to conduct cyberloafing in the workplace (Askew et al., 2014). Essentially, attitudes are somewhat different from behavior. Attitude is an act and so based on the establishment, belief, whereas behavior is an individual response or reaction to stimuli or the environment (KBBI, 2019). The third antecedent of cyberloafing is self-efficacy (confidence) in accessing the web (Internet). Concerning these skills, which are determined non-linearly by the two previous variables above (descriptive norms and cyberloafing attitude), is "confidence in accessing the web (internet)".

The second variable of cyberloafing antecedents is cyberloafing attitudes, while the third is self-efficacy (confidence) in accessing the Internet. These skills are determined non-linearly by the two previous variables and the self-efficacy in accessing the internet. Self-confidence in navigating and accessing websites (the internet) has not yet been thoroughly explored by previous researchers, leading to gaps; however, constructs (variables) that are related to corporate monitoring have a simple relationship with cyberloafing (Mastrangelo, Everton, & Jolton, 2006).

Research on cyberloafing often emphasizes the negative consequences of this behavior in terms of security threats and work activity deviations (Bock & Ho, 2009). The positive

and potential consequences of cyberloafing behavior have only received little attention. A possible positive consequence of cyberloafing is the knowledge gained that applies to recovery from work and activities related to work (Oravec, 2002; Doorn, 2011; Wagner et al., 2012; Sheikh, Atashgah, & Adibzadegan, 2015).

2. Literature Review and Hypothesis
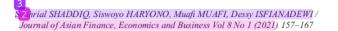
2.1. Descriptive Norms on Cyberloafing

Descriptive norms are norms that only describe what most employees do in certain conditions and situations (Robert, 2005). Descriptive norms influence behavior by informing employees about what is generally considered adaptive or effective in certain conditions and situations. Previous researchers consider that descriptive norms are strong candidates for subjective norm variables (Askew, 2009; Askew, 2012; Askew et al., 2014; Sheikh, Atashgah, & Adibzadegan, 2015). Cyberloafing is a person's activity and behavior that is characterized by the use of the Internet while working, studying, and other productive activities. It is estimated that employees spend up to two hours each day cyberloafing in the workplace costing organizations up to 85 billion dollars per year (Zakrzewski, 2016).

The antecedents of cyberloafing are closely related to work, personal life, and organization (Weissenfeld, Abramova, & Krasnova, 2019). The consequences of cyberloafing are usually considered a form of counterproductive behavior, and organizational leaders continue to invest in preventing employees from engaging in this behavior (Ugrin & Pearson, 2013). This behavior can reduce productivity, performance, and focus. Cyberloafing, or spending working time using the Internet for non-work activities (included in descriptive norms), is a major concern for employers because access to the Internet has expanded through the use of tablets, smartphones, and other electronic devices (Lim, 2002). Based on the explanation above, the hypothesis used is:

H1: Descriptive norms have a positive effect on cyberloafing.

2.2. Self-Efficacy in Accessing the Web on Cyberloafing

Self-efficacy is confidence in accessing websites via the Internet which is determined non-linearly by the two previous variables (descriptive norms and cyberloafing attitudes). Self-efficacy has not been examined in-depth and holistically by researchers; however, constructs (variables) that are related to corporate monitoring have a simple relationship with cyberloafing (Mastrangelo, Everton, & Jolton, 2006). Cyberloafing is an addictive behavior. This

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behavior is habitual and can lead to problematic behavior. The origin of addiction can lie in an employee's history of impulse control and addiction disorders (Yellowlees & Marks, 2007) or it can be caused as a way of responding to dissatisfaction or boredom (LaRose, Kim, & Peng, 2010). On the other hand, cyberloafing is a set of behavior in the workplace where an employee engages in electronically mediated activities, particularly through the use of the Internet that his or her immediate supervisor would not consider job-related (Askew et al., 2014). There is literature that offers ways to reduce the effects of habits and effects on cyberloafing behavior (Luo et al., 2019), one way is to prohibit the use of cell phones (including smartphones) in the office during working hours (Abdullahi, Mohammed, & Otori, 2019). The greater the level of individual frustration in an organizational environment, the more he/she will find ways to withdraw from it psychologically or deviate from his/her attention and engage in activities such as cyberloafing, talking to colleagues, or talking on the phone (Savitha & Akhilesh, 2019). Examples of cyberloafing activity and behavior include checking electronic mail (e-mail) and watching YouTube (Lim, 2002). Based on this explanation, the hypothesis used is:

H2: Self-efficacy in accessing the web has a positive effect on cyberloafing.

2.3. Cyberloafing Attitudes on Cyberloafing

The attitude of cyberloafing is an act committed by employees to conduct cyberloafing in the workplace (Askew et al., 2014). Essentially, attitudes are somewhat different from behavior. Attitude is an act and so based on the establishment, belief, whereas behavior is an individual response or reaction to stimuli or the environment (KBBI, 2019). The third antecedent of cyberloafing is self-efficacy (confidence) in accessing the web (Internet). Cyberloafing is defined as the "voluntary use of devices related to non-work related matters by employees in companies that provide internet and e-mail while working" (Blanchard & Henle, 2008),

Both cyberloafing and junk computing activities and behavior mention the use of organizational resources for personal purposes; however, cyberloafing is specifically intended for private Internet use, while junk computing also considers the use of organizational resources, yet done privately by offline (Blanchard & Henle, 2008). On the other hand, cyberloafing is routine deviant behavior in the workplace that has the potential to threaten security (Luo et al., 2019). Therefore, some organizations have taken action to prohibit the use of cellphones in the office during working hours (Abdullahi, Mohammed, & Otori, 2019). Cyberloafing is usually considered a form of counterproductive behavior, and organizational leaders continue to invest in preventing

employees from engaging in this behavior (Ugrin & Pearson, 2013). Based on the explanation above, the hypothesis used is:

H3: Cyberloafing attitude has a positive effect on cyberloafing.

2.4. Descriptive Norms on Exhaustion

Descriptive norms relate to the theory of planned behavior (TPB) form the basis of theory for approaching and studying cyberloafing (Askew et al., 2014; Sheikh, Atashgah, & Adibzadegan, 2015; Holguin, 2016). TPB, as applied to cyberloafing, states that cyberloafing is caused by three antecedents, i.e.: subjective social norms (descriptive norms), cyberloafing attitudes, and self-efficacy (confidence) in accessing the web (Internet), which is mediated through the intention to engage in cyberloafing (Askew et al., 2014; Sheikh, Atashgah, & Adibzadegan, 2015; Holguin, 2016). There are two broad types of norms: what others do (descriptive norms) and what others say are acceptable norms (prescriptive norms) (Park & Smith, 2007).
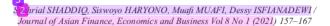
With regard to cyberloafing, prescriptive norms mean that colleagues approve the cyberloafing activities and behavior, while descriptive norms mean that the colleagues and supervisors do it together with the employee (Askew & Buckner, 2017). In summary, descriptive norms are norms that only describe what most employees do in certain situations and conditions (Robert, 2005). In situations where job demands are higher than job resources, recovery is needed to prevent exhaustion (Bakker, Demerouti, & Verbeke, 2004). The antecedents of cyberloafing are closely related to work, personal life, and organization (Weissenfeld, Abramova, & Krasnova, 2019). Descriptive norms can play a role in this process, since these norms will adapt and will influence behavior by informing employees about what is generally considered adaptive or effective, such as cyberloafing when tired, so that exhaustion can function as micro-breaks. Based on this explanation, the hypothesis used is:

H4: Descriptive norms have a positive effect on exhaustion.

2.5. Self-Efficacy in Accessing Websites on Exhaustion

Self-efficacy is confidence in accessing websites via the Internet which is determined non-linearly by the two previous variables (descriptive norms and cyberloafing attitudes). Self-efficacy has not been examined in-depth and holistically by researchers; however, constructs (variables) that are related to corporate monitoring have a simple relationship with cyberloafing (Mastrangelo, Everton, & Jolton, 2006).

Besides, one way to conceptualize perceived behavior control is the confidence of an employee to navigate to favorite websites while at work. In theory, this skill depends on three factors: navigating to a website via a search engine (ie: Google, Yahoo, and so on) or the ability to navigate to the desired website by typing a uniform resource locator (URL); the ability to circumvent blocking technology if any by using a proxy server or other means; and the presence or absence of website blocking technology in the workplace (Liberman et al., 2011; Askew, 2012; Askew et al., 2014; Glassman, Prosch, & Shao, 2015). The way to overcome this is by prohibiting employees from using cellphones in the office during working hours (Abdullahi, Mohammed, & Otori, 2019).

Exhaustion is a personal consequence. In this context, self-efficacy in accessing websites related to cyberloafing is seen as a way to shift focus on workloads, recovery to replenish employee work energy, and thus have positive and potential consequences for employee welfare. The greater the level of individual frustration in an organizational environment, the more he/she will find ways to withdraw from it psychologically or deviate from his/her attention and engage in activities such as cyberloafing, talking to colleagues, or talking on the phone (Savitha & Akhilesh, 2019). For other cyberloafing activities or behaviors, it is not known to have a positive or negative effect on welfare (Coker, 2011; Doorn, 2011; Jandaghi et al., 2015; Gökcearslan et al., 2016). Based on this explanation, the hypothesis used is:

H5: *Self-efficacy in accessing websites has a positive effect on exhaustion.*

2.6. Cyberloafing Attitudes on Exhaustion

The attitude of cyberloafing is an act committed by employees to conduct cyberloafing in the workplace (Askew et al., 2014). Another way to conceptualize perceived behavioral control is the self-efficacy of employees to engage in behaviors and even cyberloafing attitudes without being "caught" by the boss. The ability to hide cyberloafing activity and behavior refer to how well an employee can hide his computer activity from co-workers and supervisors (Askew et al., 2014, Coovert et al. Bauer, 2011). The way to overcome this is by prohibiting employees from using cellphones in the office during working hours (Abdullahi, Mohammed, & Otori, 2019).

Exhaustion is a personal consequence. In this context, self-efficacy in accessing websites related to cyberloafing is seen as a way to shift focus on workloads, recovery to replenish employee work energy, and thus have positive and potential consequences for employee welfare. The greater the level of individual frustration in an organizational environment, the more he/she will find ways to withdraw from it psychologically or deviate from his/her attention and engage in activities such as cyberloafing, talking to colleagues, or talking on the phone (Savitha & Akhilesh, 2019). For other cyberloafing activities or behaviors, it is not known to have a positive or negative effect on welfare (Coker, 2011; Doorn, 2011; Jandaghi et al., 2015; Gökcearslan et al., 2016). Based on the explanation above, the hypothesis used is:

H6: *Cyberloafing has a positive effect on exhaustion.*

2.7. Cyberloafing on Exhaustion

Cyberloafing is included in counterproductive behavior (Ugrin & Pearson, 2013). An example of this behavior that is often encountered is playing with gadgets while working. Other behaviors, such as playing video games at work over the Internet, although rare, are still included in cyberloafing (Lim & Teo, 2005). Behavior related to wasting time at work through computers often occurs under the guise of doing the actual work; however, it is cyberloafing activities and behavior (Blanchard & Henle, 2008). The repetitive activities and behaviors of cyberloafing ultimately allow employees to spend the whole day doing it (Wallace, 2004).

Exhaustion is a personal consequence. In this context, self-efficacy in accessing websites related to cyberloafing is seen as a way to shift focus on workloads, recovery to replenish employee work energy, and thus have positive and potential consequences for employee welfare. The greater the level of individual frustration in an organizational environment, the more he/she will find ways to withdraw from it psychologically or deviate from his/her attention and engage in activities such as cyberloafing, talking to colleagues, or talking on the phone (Savitha & Akhilesh, 2019). For other cyberloafing activities or behaviors, it is not known to have a positive or negative effect on welfare (Coker, 2011; Doorn, 2011; Jandaghi et al., 2015; Gökcearslan et al., 2016). Cyberloafing is included in recovery behavior that takes into account the health of employees. Cyberloafing can reduce discomfort and have a positive effect on employees and organizations (Lim & Chen, 2009). Based on this explanation, the hypothesis used is:

H7: *Cyberloafing has a positive effect on exhaustion.*

2.8. Exhaustion on Job Performance

Exhaustion affects job performance (Reinecke, 2009). Employee exhaustion can also be closely related to the recovery process being implemented, namely by cyberloafing (Doorn, 2011). Cyberloafing is often considered a counterproductive type of withdrawal behavior (Andel et al., 2019). Besides, cyberloafing is routine deviant behavior in the workplace that has the potential to threaten security (Luo et al., 2019), especially the security of personal data and company data.

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The introduction of computers in the workplace has made it difficult to link an employee's efforts to performance (Kidwell, 2010). In summary, job performance is the result achieved by an employee according to the standards applicable to the job concerned (As'ad, 2003). Job performance can be easily measured in terms of unit production, effort, and performance which can be interrelated (Doorn, 2011; Koay, Sooh, & Chew, 2017). When exhaustion conditions have improved, employees will enjoy their work and the performance will increase. Conversely, when employees are tired they will be bored at work and their performance will decline. Based on this explanation, the hypothesis used is:

H8: Exhaustion has a positive effect on job performance.

3. Research Methods

3.1. Respondents and Research Location

This research was conducted at the business services branch (service provider industries) in Indonesia, located at Yogyakarta City, Sleman Regency, and Bantul Regency (Special Region of Yogyakarta). The business services branch generally consists of four sectors, namely: consulting services, information technology (IT) services, financial services, and legal services, consisting of 5 business service branches engaged in IT, 5 business services branches engaged in finance, 5 business services branches engaged in law, and 5 business services branches engaged in consulting. The unit of analysis in this study was the individual (person).

3.2. Sampling Method

This research used non-probability sampling (purposive convenient sampling) of 280 employees (samples). The minimum for the SEM estimation and analysis process of the sample is around 200 to 250 respondents using random sampling techniques. It refers to the minimum sample size required for all types of Structural Equation Modelling (SEM) estimations (Loehlin, 1998).

3.3. Types, Data Sources, and Data Collection Techniques

This research is a quantitative research and the source of the data needed in this study was primary data that came from collecting respondents' responses through an electronic questionnaire. Primary data collection was carried out by the survey method using an electronic questionnaire (e-questionnaire) with the help of google form. The questions in the research questionnaire were closed questions using the Likert scale model.

3.4. Research Variables

The independent/exogenous variables in this study were descriptive norms (DN), cyberloafing attitudes (CA), and self-efficacy of accessing the Internet (web) (WA). Meanwhile, cyberloafing (CL) and exhaustion (EX) were mediator variables (mediation). The dependent/endogenous variable was job performance (JP).

3.5. Data Processing and Analysis Methods

The method for answering 8 research questions (RQ) along with the tools for processing and analyzing the statistical data consisted of reliability analysis (trust-worthiness), descriptive analysis, and others. Concerning data processing and analysis, Structural Equation Modeling (SEM) was used by using Analysis of Moment Structure (AMOS) software version 21 (V.21.0) to calculate the influence and mediation value.

Table 3.1: Hypothesis Testing Results

	Var.		Estimation	S.E.	C.R.	P	Decision
CL	←	DN	-0.377	0.176	-2.136	0.033*	H$_1$ Supported
CL	←	WA	0.325	0.097	3.331	***	H$_2$ Supported
CL	←	CA	0.603	0.171	3.517	***	H$_3$ Supported
EX	←	DN	0.091	0.102	0.890	0.373	H$_4$ Not Supported
EX	←	WA	0.008	0.055	0.137	0.891	H$_5$ Not Supported
EX	←	CA	-0.120	0.104	-1.162	0.245	H$_6$ Not Supported
EX	←	CL	0.957	0.089	10.768	***	H$_7$ Supported
JP	←	EX	0.319	0.084	3.782	***	H$_8$ Supported

Note: *Sign. (Significant) ≤ 0.05.

4. Results

SEM analysis was used in analyzing data by conducting validity and reliability tests in advance for each question item regarding the variable studied with the help of AMOS software. After all the results of data processing were known, a discussion was carried out related to the results of processing and the last was to draw conclusions based on the results of analysis and discussion. The profiles of respondents who answered the e-questionnaire are as follows: 1) respondents who work in the consulting sector (domain: technical/managerial/etc), 2) respondents who work in the IT sector (such as programmer/artificial intelligence (AI) engineer/user interface (UI) engineer/user experience (UX) engineer/data scientist/network engineer, etc.), 3) respondents who work in the field of finance (financial technology (fintech)/teller/customer service (CS)/etc.), and 4) respondents who work in the legal field (lawyer/notary/advocate/judge/etc.). From 300 respondents, only 280 respondents could be processed and analyzed, since these respondents had met the criteria and answered the e-questionnaire completely. Furthermore, the respondents are sorted by gender, education, age, field (sector) of work, length of service, working hours, and income.

4.1. Hypothesis Testing

Hypothesis testing results were used to test the influence of endogenous variables on exogenous variables. Hypothesis testing was based on the values contained in the structural analysis model in AMOS software. The decision hypothesis alternative (H_a) is supported if the H_a significance value is ≤ 0.05. There was a significant influence between the exogenous variables and endogenous variables. However, if the significance value ≥ 0.05, there is no significant influence between the exogenous variables and endogenous variables (H_a is not supported). The results of hypothesis testing are summarized in Table 4.1.

5. Discussion

5.1. The Influence of Descriptive Norms on Cyberloafing

The results of testing the first hypothesis (H_1) indicate that the descriptive norm (DN) has a significant positive influence on cyberloafing (CL) with a positive sign (P = 0.033*). This means that the first hypothesis (H_1) proposed in this study is supported by the results of previous studies conducted by Lim (2002), Robert (2005), Askew (2009), Askew (2012), Askew et al. (2014), Sheikh, Atashgah, and Adibzadegan (2015), Zakrzewski (2016), Ugrin and Pearson (2013), and Weissenfeld, Abramova, and Krasnova (2019). There is an influence of descriptive norms on cyberloafing.

Cyberloafing plays a vital and fundamental role in today's era of disruption. Descriptive norms are related and influence cyberloafing, especially when the employees work from home. Descriptive norms that are practiced in conjunction with cyberloafing have influenced the life aspects of the employees. Cyberloafing has its advantages and disadvantages. The benefit is that respondents can continue to receive updated data and information, even though the data and information obtained are not related to work. On the other hand, many respondents are immersed in cyberspace (cyberloafing), resulting in the delay of the completion of work.

In the era of society 5.0, humans cannot be separated from the Internet. International networking (Internet) is like an addiction to humans in general, as well as for employees who are working in particular. Computer interaction with humans or human-computer interaction (HCI) has become common in industrial revolution 4.0. Computers (electronic calculating machines) in today's context vary from personal computers (PCs), laptops, tablets, notebooks, devices, etc. (Nguyen & Luu, 2020; Kim & Seo, 2020). This behavior (idling in cyberspace/cyberloafing) can reduce productivity, job performance, and results in focus failure. Cyberloafing, or spending working time using the Internet for non-work activities (included in descriptive norms), is a major concern for employers since the access to the Internet has expanded through the use of tablets, smartphones, and other electronic devices (Lim, 2002; Park & Javed, 2020). The occurrence of this behavior is very common, especially in the current situation and conditions, of the coronavirus (COVID-19) pandemic. All respondents involved in this study have conducted cyberloafing. In this regard, it is shown that the factors that cause self-efficacy to access the web have a significant and positive influence on cyberloafing. This self-efficacy has a close relationship with cyberloafing. The findings are: the more frequently employees access the web at work, the higher the influence of cyberloafing. Conversely, the less frequently employees have self-efficacy in accessing the web at work, the lower the influence of cyberloafing. Based on the results of hypothesis testing, analysis, and discussion, the proposed hypothesis (H_1) is proven and supported.

5.2. The Influence of Self-Efficacy in Accessing the Web on Cyberloafing

The results of testing the second hypothesis (H_2) indicate that self-efficacy in accessing the web (WA) has a significant and positive influence on cyberloafing (CL). It means that the second hypothesis (H_2) proposed in this study is supported by the results of previous studies conducted by Lim and Teo (2005), Mastrangelo, Everton, and Jolton (2006), Yellowlees and Marks (2007), LaRose, Kim, and Peng (2010), Askew

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et al. (2011), Askew et al. (2014), Abdullahi, Mohammed, and Otori, 2019 (2019), Luo et al. (2019), and Savitha and Akhilesh (2019).

Self-efficacy is confidence in accessing websites via the Internet which is determined non-linearly by the two previous variables (descriptive norms and cyberloafing attitudes). Self-efficacy has not been examined in-depth and holistically by researchers; however, constructs (variables) that are related to corporate monitoring have a simple relationship with cyberloafing (Mastrangelo, Everton, & Jolton, 2006). Self-efficacy in accessing the web plays an important role as an antecedent of cyberloafing. The research results showed that there is a significant influence between self-efficacy in accessing the web on cyberloafing. All respondents predominantly practice self-efficacy in accessing some websites at work. The self-efficacy of accessing the Internet has also proven to be one of the antecedents of cyberloafing. Amid the COVID-19 pandemic, the frequency of self-efficacy in accessing the Internet tends to increase. This is influenced by various factors, one of which is cyberloafing.

Cyberloafing strongly affects the self-efficacy in accessing the Internet. The term cyberloafing and self-efficacy are like stamps and letters that are always attached and inseparable. When an employee performs self-efficacy in accessing the Internet, it can be said that the employee is also cyberloafing. This is how cyberloafing has become a habit and behavior of employees that always go hand in hand with self-efficacy in accessing the Internet (Park & Javed, 2020). In this case, the factors that cause self-efficacy in accessing the Internet have a significant and positive influence on cyberloafing, since self-efficacy in accessing the Internet has a close relationship with cyberloafing. The more frequently employees access certain websites at work, the higher the influence of cyberloafing. Conversely, the less frequently employees perform self-efficacy in accessing the Internet at work, the lower the influence of cyberloafing. Based on the results of hypothesis testing, analysis, and discussion, the proposed hypothesis (H_2) is proven and the decision H_2 is supported.

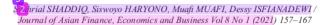### 5.3. The Influence of Cyberloafing Attitudes on Cyberloafing

The results of testing the third hypothesis (H_3) show that the attitude of cyberloafing (CA) has a significant and positive influence on cyberloafing (CL) with a positive sign (P = ***). It means that the third hypothesis (H_3) proposed in this study is supported by the results of previous research conducted by Blanchard & Henle (2008), Ugrin and Pearson (2013), Askew et al. (2014), Andel et al. (2019), Korunovska and Spiekermann (2019), Zakrzewski (2016), Luo et al. (2019), and Abdullahi, Mohammed, and Otori (2019). In reality, cyberloafing which is the focus of this research has a negative tendency for employees. This is reinforced from the results

of research, existing phenomena, supporting theories, and all matters relating to cyberloafing in this study. From an Islamic perspective, the cyberloafing attitude and cyberloafing have a double meaning. First, doing these two things is a sin since it will cut the influence of working time (time corruption), while the second meaning implied that it is permissible to do both things during break time or while not working.

Some organizations are taking action to prohibit the use of cellphones in the office during working hours (Abdullahi, Mohammed, & Otori, 2019). As a result, cyberloafing is usually considered a form of counterproductive behavior, and organizational leaders continue to invest in preventing employees from engaging in this behavior (Ugrin & Pearson, 2013). In this regard, the factors that cause cyberloafing to have a significant and positive influence on cyberloafing are because cyberloafing attitudes have a close relationship with cyberloafing. The more often employees cyberloafing at work, the higher the influence of cyberloafing. On the other hand, the less frequently employees do cyberloafing at work, the lower the influence of cyberloafing. Based on the results of hypothesis testing, analysis, and discussion, the proposed hypothesis (H_3) is proven and H_3 is supported.

5.4. The Influence of Descriptive Norms on Exhaustion

The results of testing the fourth hypothesis (H_4) indicate that the descriptive norm (DN) does not influence exhaustion (EX), as P = 0.373. It means that the fourth hypothesis (H_4) proposed in this study does not support the results of previous studies conducted by Robert (2005), Park and Smith (2007), Askew and Buckner (2017), Ajzen (2011), Askew et al. (2014), Sheikh, Atashgah, and Adibzadegan (2015), Holguin (2016), Weissenfeld, Abramova, and Krasnova (2019).

Descriptive norms relate to the theory of planned behavior (TPB) which is the basis for the theory used in approaching and studying cyberloafing (Askew et al., 2014; Sheikh, Atashgah, & Adibzadegan, 2015; Holguin, (2016). The phenomena do not support these theories, especially theories relating to descriptive norms of exhaustion. The descriptive norm does not influence exhaustion. This phenomenon occurs and is influenced by various factors, one of which is the absence of a direct relationship (influence) between descriptive norms on exhaustion. The results showed that the antecedents of cyberloafing, namely descriptive norms, will only influence exhaustion through the mediating variable, namely cyberloafing. Cyberloafing during working hours is certainly very unwise and risks exhaustion. Employees have been working from home for almost 8 months, and this certainly affects the working norms. However, in reality, this does not apply during the COVID-19 pandemic. The hypothesis regarding the influence of descriptive norms on exhaustion is not supported in current situations and conditions.

Associated with situations where job demands are higher than job resources, recovery is needed to prevent exhaustion (Bakker, Demerouti, & Verbeke, 2004). Cyberloafing generally has antecedents that are closely related to work, personal life, and organization (Weissenfeld, Abramova, & Krasnova, 2019). Descriptive norms can play a role in this process, since these norms will adapt and will influence behavior by informing employees about what is generally considered adaptive or effective, such as cyberloafing when tired, so that exhaustion can function as micro-breaks. However, the results of hypothesis testing in research conducted based on existing realities in the workplace are different from the provisional answers (hypotheses) proposed. Based on hypothesis testing, analysis, and discussion, the proposed hypothesis (H_4) has not been proven and its decision and H_4 is not supported.

5.5. The Influence of Self-Efficacy in Accessing Websites on Exhaustion

The results of testing the fifth hypothesis (H_5) show that self-efficacy on accessing websites (WA) does not influence exhaustion (EX), because P = 0.891. It means that the fifth hypothesis (H_5) proposed in this study does not support the results of previous research conducted by Liberman (2011), Coker (2011), Doorn (2011), Askew (2012), Askew et al. (2014), Glassman (2015), Jandaghi et al. (2015) Gökcearslan et al. (2016), and Abdullahi, Mohammed, and Otori (2019). Exhaustion as a mediating variable of cyberloafing is caused by various factors. One of them is physical and mental exhaustion. Physical exhaustion, for example, causes symptoms such as back pain from sitting too long and other physical complaints. Mental exhaustion usually happens from too much mental pressure. This of course affects the psychological condition of the employees who work. Regular treatment needs to be done to minimize the complaints above.

In this study, there is no influence of self-efficacy in accessing the Internet on exhaustion. It means that there is a discrepancy between the theory and the real condition. A robust theory always adapts to real phenomena and has high flexibility. The results remain the same when faced with different situations, conditions, and contexts. When a theory is faced with different situations, conditions, and contexts, yet the results are different, it indicates that the theory is still raw and theory testing must be carried out to reach the robust stage. In this context, self-efficacy in accessing websites related to cyberloafing is seen as a way to shift focus on workloads, recovery to replenish employee work energy, and thus have positive and potential consequences for employee welfare. The greater the level of individual frustration in an organizational environment, the more he/she will find ways to withdraw from it psychologically or deviate from his/her attention and engage in activities such as cyberloafing, talking to colleagues, or *talking on the*

phone (Savitha & Akhilesh, 2019). For other cyberloafing activities or behaviors, it is not known to have a positive or negative effect on welfare (Coker, 2011; Doorn, 2011; Jandaghi et al., 2015; Gökcearslan et al., 2016). Based on the hypothesis testing, analysis, and discussion, the proposed hypothesis (H_5) has not been proven and H_5 is not supported.

5.6. The Influence of Cyberloafing Attitudes on Exhaustion

The results of testing the sixth hypothesis (H_6) indicate that cyberloafing (CA) has a non-significant influence on exhaustion (EX). It means that the sixth hypothesis (H_6) proposed in this study is not supported by the results of previous research conducted by Askew et al. (2014), Askew et al. (2011), Coker (2011), Doorn (2011), Jandhagi et al. (2015), Gökcearslan et al. (2016), Abdullahi, Mohammed, and Otori, (2019), and Savitha and Akhilesh (2019).

Concerning the results of research related to cyberloafing attitudes towards exhaustion, based on the results of testing hypotheses, facts, and phenomena, there is no influence of cyberloafing attitudes on exhaustion. Therefore, it is necessary to conduct theory-testing on an ongoing basis and adapted to the context and changing times. Situations and conditions at work as well as psychological situations and conditions of respondents generally influence the results of the research. If the theory is robust, under any circumstances, the hypothesis should be supported (H_6 supported). That is one of the characteristics that the theory is robust and there is no need for testing the theory anymore. However, if the theory is not robust, theory testing should be carried out.

Exhaustion is a personal consequence. In this context, cyberloafing is seen as a way to shift focus on workloads, recovery to replenish employee work energy, and thus have positive and potential consequences for employee welfare. The greater the level of individual frustration in an organizational environment, the more he/she will find ways to withdraw from it psychologically or deviate from his/her attention and engage in activities such as cyberloafing, talking to colleagues, or *talking on the phone* (Savitha & Akhilesh, 2019). For other cyberloafing activities or behaviors, it is not known to have a positive or negative effect on welfare (Coker, 2011; Doorn, 2011; Jandaghi et al., 2015; Gökcearslan et al., 2016). Based on hypothesis testing, analysis, and discussion, the proposed hypothesis (H_6) has not been proven and H_6 is not supported.

5.7. The Influence of Cyberloafing on Exhaustion

The results of testing the seventh hypothesis (H_7) indicate that cyberloafing (CL) has a significant and positive influence on exhaustion (EX) because of P = ***. It means that the seventh hypothesis (H_7) proposed in this study is supported by the results of previous studies conducted by Wallace (2004), Lim and Teo, (2005), Blanchard and Henle (2008), Lim and

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Chen (2009), Coker (2011), Doorn (2011), Ugrin and Pearson (2013), Jandaghi et al. (2015), Aghaz and Sheikh (2016), Gökcearslan et al. (2016), Stoddart (2016), Koay, Sooh, and Chew (2017), Korunovska and Spiekermann (2019), and Wu et al. (2020). The repetitive activities and behaviors of cyberloafing ultimately allow employees to spend the whole day doing cyberloafing activities (Wallace, 2004). Cyberloafing on exhaustion has a significant positive influence. It means that all mediating variables have an influence, before finally reaching the endogenous variable (job performance).

Based on the results of hypothesis testing and data, cyberloafing influences employee exhaustion. For example, employees cyberloafing at work (in situations and conditions of working from home) from morning to evening feel exhausted. The exhaustion they feel is generally physical and mental. It is humane; thus, when we feel exhausted, the ideal thing to do is rest. Cyberloafing and exhaustion are like causal influences; employees will be exhausted when doing cyberloafing activities or behavior for a long time. In this regard, strategy formulation is needed to reduce the impact of exhaustion from cyberloafing. The method that seems appropriate and relevant to overcome this is: when employees work for too long at the same time doing cyberloafing, it is important to take short breaks and relaxation. This will have a positive influence on the exhausted employees and provide a moment of relaxation. Repeat the treatment stages periodically and continuously to minimize the impact of exhaustion from cyberloafing. Related to the results of this study, there is an agreement between theory and facts in the workplace, that cyberloafing influences exhaustion.

The factors that cause cyberloafing to have a significant influence on exhaustion are the close connection between cyberloafing and exhaustion. The more often employees engage in cyberloafing activities and behavior at work, the higher the level of exhaustion they feel. Conversely, the less often employees engage in cyberloafing activities and behavior in the workplace, the lower the level of exhaustion. Based on the hypothesis testing, analysis, and discussion, the proposed hypothesis (H_7) is proven and H_7 is supported.

5.8. The Influence of Exhaustion on Job Performance

The results of testing the eighth hypothesis (H_8) show that exhaustion (EX) has a significant and positive influence on HR performance (JP), since P = ***. It means that the eighth hypothesis (H_8) proposed in this study is supported by the results of previous research conducted by As'ad, (2003) Reinecke (2009), Kidwell (2010) Doorn (2011), Koay, Sooh, and Chew (2017), Andel et al. (2019), and Luo et al. (2019). In line with the progress of the times in the industrial revolution 4.0 and society 5.0, based on the observed phenomena, employees tend to constantly improve their abilities and capabilities by participating in free webinars and free online seminars during the COVID-19 pandemic. Based on exploration and tracing, employees tend to do multitasking. For example, employees do work while participating in webinars on their computers, laptops, or smartphones. This should be suspected of being a factor in the decline in employee performance.

The introduction of computers in the workplace has caused difficulties in linking an employee's efforts to performance (Kidwell, 2010). In summary, job performance is the result achieved by an employee according to the standards applicable to the job concerned ((As'ad, 2003). HR performance can be easily measured in terms of unit production, effort, and interrelated performance (Doorn, 2011; Koay, Sooh, & Chew, 2017). When the exhaustion condition has returned, the employees return to enjoy their work and the employee's performance will increase. Conversely, when employees are exhausted, they will feel bored and the performance will decline.
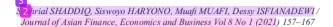
6. Conclusion and Implications

6.1. Conclusion

From the results of this research, it can be concluded that five hypotheses proposed in this study is supported, namely: The influence of the descriptive norms on cyberloafing, the influence of self-efficacy in accessing websites on cyberloafing, the influence of cyberloafing attitudes on cyberloafing, the influence of cyberloafing attitudes on exhaustion, and the influence of exhaustion on job performance. On the other hand, descriptive norms, self-efficacy in accessing websites, and cyberloafing attitudes have no significant influence on exhaustion.

6.2. Implications

6.2.1. Theoretical Implications

The results of this study indicate that the theory regarding cyberloafing has been confirmed; service provider industry employees engage in cyberloafing activities and behaviors. This research has theoretical implications, namely filling research gaps with regard to antecedents and consequences of cyberloafing in the service industry during the COVID-19 pandemic. Theoretically, this study verifies and confirms the antecedents of cyberloafing, namely descriptive norms, self-efficacy of accessing the web, and attitudes of cyberloafing, along with its consequences, namely job performance. Employees have carried out cyberloafing activities and behaviors while working, such that performance tends to decline. Employees will always try to find ways to do cyberloafing again; therefore, a right strategy is needed regarding cyberloafing so that cyberloafing activities and behavior will be minimized to improve performance.
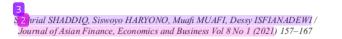
6.2.2. Managerial Implications

It is recommended to stakeholders and all related human resources to implement the results of this research. Besides, this research is expected to be useful for related companies in making policies regarding cyberloafing that are mutually beneficial. It is necessary to have the right strategy to improve performance, one of which is the prohibition of cyberloafing while working. Companies are also advised to increase discipline in the company so that cyberloafing activities and behavior will be minimized to improve performance. Employees are advised to 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. Therefore, it is important to carry out periodic monitoring and evaluation to assess employee performance amid the COVID-19 pandemic.

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