

Research Article

Relationship Between Academic Self-efficacy and Cyberloafing Behavior Among College Students in Malang City

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Abstract.

One of the negative impacts of increasing internet use in online lectures is cyberloafing. Cyberloafing is the behavior of using the internet for nonacademic purposes. The level of cyberloafing can be influenced by their self-confidence in their abilities in the academic field or what is known as academic self-efficacy. The aim of this research is to determine the relationship between academic self-efficacy and cyberloafing behavior among students in Malang City. This research is correlational quantitative research. The research subjects were taken by purposive sampling, a total of 405 students. Data collection instruments used The Five Factor Cyberloafing Scale with 29 of 30 items are valid and reliable ($\alpha = .991$) and the Academic Self-Efficacy Scale with 27 items ($\alpha = .945$). The results of hypothesis testing using Spearman Rank can be concluded that there is a negative and significant relationship between academic self-efficacy and cyberloafing in students ($r(403) = -0.782$ $p < 0.001$). This shows that the higher the student's academic self-efficacy score, the lower the cyberloafing behavior will be.

Keywords: academic self-efficacy, cyberloafing, college students

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1. Introduction

Many changes that occurred when the world faced the Covid-19 pandemic were changing patterns in the world of work and education. If previously more work and teaching was done offline (face-to-face), then during the co-19 pandemic, the Minister of Administrative Reform and Bureaucratic Reform (Menpan RB) based on Minister of PANRB Circular No. 6/2022 regarding policies for all employees to do Work From Home (WFH) and take place online [1]. This is also in line with the Ministry of Education and Culture's efforts to apply this policy to its students, and has reached 78% of the total 183,566 educational units that use online learning from preschool to higher education levels [2]. Currently, Indonesia is still putting the finishing touches on an online education program designed to stop the spread of the COVID-19 virus [3].



With the change in the form of the learning process to online, the learning is carried out online by utilizing internet media on devices such as zoom meetings, google meet, whatsapp, and other media that support the learning process. This is the reason that students cannot be separated from devices in the learning process. Changing the learning process from face-to-face to online can have both positive and negative impacts. The positive impact of online learning for students is that they feel comfortable because they do not need to go to campus, more time to do practicum online while the negative impact is that students become lazy in learning so that self-motivation decreases, feel frustrated in learning and can cause distractions and affect focus in students [4, 5]. This certainly does not only happen to college students and students, but also happens to employees who do Work From Home (WFH), employees who use the internet for personal purposes during working hours, are considered non-productive behavior during working hours. This behavior is called cyberloafing [6].

Cyberloafing in the field of education which has been explained by Kalayci (In Yaşar, Sevil, and Halil Yurdugül, 2013) is the action of students in using internet access that is not relevant when learning takes place [7]. This is also in line with research conducted by Akbulut et al, explaining that cyberloafing behavior in students is the behavior of using the internet for non-academic purposes, this behavior is considered negative because it can reduce student productivity in completing their lecture assignments [8]. In the context of education, this term refers to an activity carried out by students in using internet access that is not relevant during lectures. This cyberloafing activity consists of sharing, accessing the internet to send messages to others, checking video posts and shared photos. Shopping, using the internet by opening online shopping sites. Real time updating is the latest trend to share activities and comments on social media. Online content accessing is using the internet to access videos, listen to music. Gaming/gambling is accessing the internet in an online game.

To some extent, cyberloafing is considered normal because it has a positive impact, namely it can reduce academic stress so that individuals feel better and more enjoyable [9]. it can also provide inspiration and creativity [10]. However, if done excessively and repeatedly, it can have a negative impact, which can affect students' attention and ability to focus on their main task and can cause interference in the learning process [11]. Varol & Yildirim's research revealed that there are several reasons for cyberloafing behavior, namely on motivation, for example a lack of motivation in oneself and being overwhelmed with one's work, on the learning environment in class, for example in a classroom that is not conducive, and on attitudes during the learning process, this

attitude also refers to self-confidence in the learning process, and free time, students who have a lot of free time tend to do cyberloafing behavior [12]. Furthermore, there are research findings by Prasad, et al revealing that cyberloafing behavior is strongly influenced by several personality variables, namely self-regulation, conscientiousness, and self- efficacy [13]. Some of these personality variables can significantly influence cyberloafing behavior [14]. High and low cyberloafing can be influenced by how students can regulate themselves, which starts from their confidence in their abilities in their academic fields. This condition is known as academic self-efficacy.

Zajacova's research, et al revealed that Academic self-efficacy is students' confidence in their capacity to perform academic tasks, such as writing papers and studying for exams [15]. There are four dimensions of academic self-efficacy formation, namely Interaction at school, students' ability to socialize with teachers and staff at school, actively asking questions, easily making friends. Academic performance out of class, students' confidence in their abilities outside of learning at school such as participating in competitions or Olympics. Academic performance in class, displaying their abilities such as doing assignments on time, taking exams seriously. Managing work, family, and school, the capacity to schedule time for each activity. Basically, self-confidence is very important for assessing external demands. Any external demands will be seen as a challenge, especially the challenge to fulfill the ability to complete the task [16].

Based on research conducted by Prasad, it is revealed that someone who has high self efficacy must have the ability to convince themselves to be able to complete work or tasks well [13]. Because someone who has high self efficacy can prepare himself not to do cyberloafing behavior. And also individuals with high self efficacy consider themselves as good regulators. Self efficacy is an important thing that must be owned by students because it can affect the thinking process, emotional state and learning motivation [17]. Especially in academic matters, individuals who have high academic self-efficacy tend to try hard, be resilient and are very confident in themselves to be able to complete difficult academic tasks [18]. The phenomenon that has been described is that students with low academic self-efficacy can have an impact on students' attitudes and self-confidence so that they carry out cyberloafing behavior during learning hours.

Departing from the explanation above, this study focuses on examining academic self-efficacy with cyberloafing behavior in students in Malang City because there are quite a lot of students who are still doing online learning activities, these two factors can be a driving force for students to carry out cyberloafing behavior. This can certainly interfere with learning where students become less focused on the material

that has been delivered by the lecturer so that it has an impact on their academic self-efficacy. So it appears that research on academic self-efficacy with cyberloafing in students in Malang City is important to do. There have been many studies that discuss self-regulation, smartphone addiction, cyberloafing and academic stress, but only a few studies discuss the relationship between academic self efficacy and cyberloafing behavior. So that there is a need for deeper research related to this phenomenon.

2. Methods

To ascertain the relationship or correlation between the independent variables, a correlational quantitative method is used in this study where the independent variable is Academic Self Efficacy and the dependent variable is Cyberloafing in students in Malang City. This investigation utilized two instruments that were adapted by the researcher. The Meaning Cyberloafing & Academic Self Efficacy stated that cyberloafing in the context of education is an activity carried out by students in using internet access that is not relevant during lectures [8, 15]. Cyberloafing is measured using The Five Factor Cyberloafing Scale including Sharing, Shopping, Real-time Updating, Accessing Online Content, Gaming/Gambling components. Sharing (Chatting and Posting Content) Refers to a wide range of social media activities, including posting personal content, watching content on social media accounts, commenting on others' posts, chatting with friends, and sharing images or videos on platforms such as Facebook, Instagram, WhatsApp, etc. Shopping, Online shopping activities.

Indicators of this dimension cyberloafing include visiting online shopping sites, buying products online, using online transaction services, searching for job advertisements on social media. Real-time Updating (tweeting) This dimension is specifically on twitter application users. Has indicators including reading and posting tweets on social media, commenting on trending topics, sharing posts. Accessing Online Content (Downloading videos & music) Online content access behavior includes things like downloading movies or music and using apps to listen to music. Gaming/Gambling Use of electronic devices that include playing online games or gambling. There are indicators in this dimension, namely playing online games, visiting sports sites, performing gambling actions online and accessing online betting sites.

Zajacova et al defined that academic self-efficacy is a student's confidence in his or her ability to complete academic tasks, such as studying for exams and writing papers, is known as academic self-efficacy [15]. Academic self-efficacy is measured using the

Academic Self-Efficacy Scale (ASES) including components of Interaction at school, Academic performance out of class, Academic performance in class, Managing work, family, and school. Interaction at school the ability to socialize and interact with staff at school, has indicators such as being active in class discussions, daring to ask questions, being able to make friends in class and outside of class. Academic performance out of class trust to be able to demonstrate their abilities, including indicators such as writing essays, mastering materials outside of learning, participating in competitions.

Academic performance in class, is able to display abilities during class learning, has indicators such as being able to do well on exams, being able to take the hardest classes, getting good rankings, doing assignments on time. Managing work, family, and school,. the ability to effectively manage time between work, family and school activities. Population and Sample this research was conducted on university students in Malang City. The population in the study were active students in Malang City. The number of respondents in this study amounted to 405 respondents. Technically, the determination of the number of sample members is carried out by calculating the total number of students in Malang City using the 10% Slovin formula (Sanusi, 2011). The sample in this study used accidental sampling technique. Accidental sampling is a sampling technique based on chance, that is, anyone who by chance / incidentally meets the researcher can be used as a sample, if it is deemed that the person who happened to be met is suitable as a data source [19]. Furthermore, sampling in this case is taken based on the following characteristics, college Students in Malang City, 18 - 25 years old, Internet users.

The instrument to measure cyberloafing is The Five Factor Cyberloafing Scale developed by Akbulut et al., [8]. This scale consists of several components, namely 1) Sharing, 2) Shopping, 3) Real-time Updating, 4) Accessing Online Content, 5) Gaming/Gambling with a total of 30 items. The TFFCS uses 5 alternative answer choices (Never, rarely, sometimes, often, almost always). This measurement tool has also gone through a translational process. Internal consistency and reliability tests using SPSS 16.0 found that the measuring instrument of The Five Factor Cyberloafing Scale was declared 29 valid and reliable items, while only 1 item was not valid and reliable ($\alpha = .945$).

The dependent variable is academic self-efficacy, namely using the Academic Self Efficacy Scale (ASES) developed by Zajacova et al. [15]. This scale consists of several components, namely 1) Interaction at school, 2) Academic performance out of class, 3) Academic performance in class, 4) Managing work, family, and school with a total of 27 items. The ASES uses 10 alternative answer choices (from 0 = very unconfident to 10 =

very confident). This measurement tool has also gone through a translational process. The results of the validity and reliability tests using SPSS 16.0 found that the Academic Self Efficacy Scale measuring instrument was declared 27 items valid and reliable ($\alpha = .991$). At the data collection stage, researchers used a Google Form questionnaire and distributed links via social media through the whatsapp, instagram and telegram applications. The data analysis technique used in this study using the spearman rank correlation test on the TFFCS and ASESS scales, then hypothesis testing is carried out on each component. Aims to find out how strong the correlation is between academic self-efficacy and cyberloafing behavior.

3. Result and Discussion

3.1. Result

Based on the research demographic data, the 405 research respondents were mostly 20 years old (21.7%), female 219 people (53.9%) male 187 people (46.1%), came from public universities as many as 263 people (64.9%), majoring in non-exact majors (Psychology, Law, Political Science, Accounting, Communication Science, HI, BK, Sociology). 241 people (59.5%), the largest number of batches is the 2021 batch with a total of 130 people (32.1%). With an average final GPA of 2.76 - 3.50, namely 184 people (45.4%), more often use synchronous learning media (88.1%), the intensity of the length of time accessing the internet is 1 - 5 hours (49.9%), the activity of accessing the internet dominates in 3 activities with the first highest average number, namely chatting 304 people (75.1%), opening social media with 286 people (70.6%), playing games 150 people (36.9%), and shopping online with 17 people (43%), others 38 people (8.5%).

Based on Table 2, the Academic Self Efficacy variable (X) found that the empirical mean is lower than the hypothetical mean ($\bar{x} = 97.33 < 135$). This shows that Academic Self Efficacy in respondents tends to be low. Then, on the Cyberloafing variable (Y) the empirical mean value produced is higher than the hypothetical mean value produced ($\bar{x} = 174.53 > 150$). This means that Cyberloafing on respondents tends to be high. resulting ($\bar{x} = 174.53 > 150$).

Based on the table above, the results of hypothesis testing begin with conducting an assumption test first, using the normality test & linearity test. The normality test in this study uses the Kolmogorov-Smirnov technique. The results obtained from the normality test state that the two variables, namely Academic self-efficacy (X) and Cyberloafing (Y)

TABLE 1: Characteristics.

Characteristics		Frequency	Percentage (%)
Age	18 Years	29	7,1%
	19 Years	82	20,2%
	20 Years	88	21,7%
	21 Years	80	19,7%
	22 Years	82	20,2%
	23 Years	21	5,2%
	24 Years	14	3,4%
	25 Years	10	2,5%
Last GPA	< 2,00	10	2,5%
	2,00 - 2,75	105	25,9%
	2,76 - 3,50	184	45,3%
	>3,51	107	26,4%
Learning Methods	Synchronous	358	88,2%
	Asynchronous	48	11,8%
Duration of Internet Use	>5 Hours per day	191	47%
	1-5 Hours per day	202	49,8%
	<1 hour per day	13	3,2%
Internet access activities during lecture hours	Shop Online	174	42,9%
	Opening Social Media	287	70,7%
	Chattingan	305	75,1%
	Playing Games	150	36,9%
	Download Video/Music	87	21,4%
	More	38	8,5%

TABLE 2: Descriptive Statistic.

Variables	N	Hypothetical				Empirical			
		Min	Max	Mean	Std. Dev	Min	Max	Mean	Std. Dev
Academic Efficacy	Self 403	0	270	135	45	30	124	97,33	18,864
Cyberloafing	403	30	150	90	20	37	260	174,53	61,518

with results smaller than 0.05 are not normally distributed. The linearity test concluded the results of 0.023 and more than 0.05 (0.000 <0.05) so that the variables were not

TABLE 3: Hypotesis Test Result.

Correlations				
			Cyberloafing	ASES
Spearman's rho	Cyberloafing	Correlation Coefficient	1.000	-.782**
		Sig. (2-tailed)	.	.000
		N	403	403
	ASES	Correlation Coefficient	-.782**	1.000
		Sig. (2-tailed)	.000	.
		N	403	403

** . Correlation is significant at the 0.01 level (2-tailed).

linear. After the assumption test was carried out, then the researcher conducted a hypothesis test. Namely the spearman rank test.

Hypothesis testing in research aims to make a decision on the hypothesis that has been proposed to obtain convincing results between being accepted or rejected (Arifin, 2017). The spearman rank test shows that there is a significant relationship between academic self-efficacy (X) and cyberloafing behavior (Y), with a correlation coefficient of $r(403) = -0.782$, $p < 0.001$; two-tailed (Hypothesis Accepted). And it is negative, indicating that it has a strong relationship. This means that the higher the value of academic self-efficacy in students, the lower the cyberloafing behavior will be.

3.2. Discussion

Based on the results of the data that has been analyzed, it can be seen that there is a significant relationship between academic self-efficacy and cyberloafing behavior with a negative relationship direction. This means that the higher the value of academic self-efficacy in students, the lower the cyberloafing behavior will be. Conversely, the lower the academic self-efficacy in students, the higher the cyberloafing behavior will be. This is supported by research by Tugtekin which states that the relationship between academic self efficacy and cyberloafing has a negative relationship [20]. Furthermore, similar research has also been conducted by Diar Fatharani, Sugandi which states that there is a negative relationship between self-efficacy and cyberloafing in students [21].

Based on the correlation coefficient value obtained of -0.096. The correlation coefficient value is to determine how strong the relationship is between the academic self-efficacy variable and the cyberloafing variable, therefore whether there is a pattern of

relationship between the two variables in a positive or negative direction. Based on the correlation coefficient guidelines that have been carried out by Sugiyono the coefficient (0.20 - 0.399) is included in the weak / low categorization [22]. Based on this category, the correlation coefficient value obtained in this study is - 0.096, which indicates that the correlation between academic self-efficacy and cyberloafing is relatively weak. The weak correlation value between academic self efficacy and cyberloafing indicates that academic self efficacy only contributes slightly to the tendency of students to engage in cyberloafing behavior. The negative direction of this relationship means that the higher the academic self efficacy in students, the lower the cyberloafing behavior will be. The correlation coefficient value shows that there is a contribution from academic self efficacy to cyberloafing behavior.

A total of 405 students in this study revealed that students who engage in cyberloafing behavior dominate on synchronous learning media as much as (88.1%). With the majority of non-exact majors (59.9%). This is because students with non-exact majors have more hours outside of college than exact majors who have a lot of practicum and must attend lectures. In the exact major clump has a higher level of difficulty than the non-exact major clump. Students with exact majors do more reasoning and the ability to work with numbers to support achievement [23]. This exact science contains more material about mathematics, while non-exact science does not have mathematical material in it [24].

Academic Self Efficacy (X) found that the empirical mean is lower than the hypothetical mean ($\bar{x} = 97.33 < 135$). This shows that Academic Self Efficacy in respondents tends to be low. Then, on the Cyberloafing variable (Y) the empirical mean value produced is higher than the hypothetical mean value produced ($\bar{x} = 174.53 > 150$). This means that Cyberloafing on respondents tends to be high. generated ($\bar{x} = 174.53 > 150$). This means that there are still many students who engage in cyberloafing behavior and have low confidence in their academic abilities. According to the research findings, students who have difficulty controlling themselves end up cyberloafing during class. This is consistent with the research by Prasad et al which shows that students' tendency to cyberloafing is significantly influenced by their sense of self-efficacy [13]. To reduce the possibility of undesirable behavior, students should be able to control their behavior and modify it to suit the desired outcome. People who have high academic self-efficacy will be able to control their behavior and regulate themselves to achieve their goals.

Students who often practice academic self-efficacy will strengthen their self-regulation, thus allowing them to bring up behaviors that are in accordance with their wishes, in a study conducted by Baumeister et al [25]. Based on the findings of the study, it is evident that people with high levels of self-efficacy will usually take actions that advance their goals and refrain from actions that will distract them from doing so. One of the behaviors that hinder goal achievement is cyberloafing. However, the results of research obtained by Huang (2013) revealed that for categorization on gender found that female students have a high level of self-efficacy in arts and language learning, while male students have a high level of self-efficacy in computer and social science learning [26]. Arikunto revealed Bandura's states that men have high self efficacy compared to women [27]. Conversely, women have high self efficacy in certain fields of work compared to men. As stated by Santrock (2008; 538), self efficacy related to learning competencies between female students and male students is different in fulfilling the context of learning outcomes that will be achieved [28].

The results of this study are due to the presence of a larger number in the female gender, namely it was found that 219 students or around 53.9% of 405 female students had high cyberloafing behavior. Compared to the male gender with 187 students or around 46.1% having lower cyberloafing behavior than the female gender. Subjects access the internet more for chatting (75.1%), online shopping (43%) and playing games (36.9%). This is in accordance with Knight's theory which states that women are more likely to engage in cyberloafing behavior in class [29]. This is also in accordance with research conducted by Anderson & Jiang that women more often use social media to express themselves in establishing and maintaining relationships with family, coworkers, friends, fashion and makeup updates [30]. Meanwhile, men are more often to play games and access social media to gain general knowledge [31]. Women also spend as much as 30% of their time communicating through social media, while men only use 26% of their time to interact on social media [32]. The research conducted by Sheldon revealed that women prefer social media to establish relationships with friends, lovers, family, pass the time, entertainment, however, it is different from men who only use social media to meet new people [33].

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