The Role of Self-Control in Mediating The Influence of Descriptive Norms and Academic Stress on Intentioncyberloafing

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ABSTRACT

This research aims to: analyze the influence of descriptive norms on cyberloafing, academic stress on cyberloafing, self-control on cyberloafing, descriptive norms on self-control, academic stress on self-control, descriptive norms on cyberloafing through self-control as a mediating variable, and analyze the influence of academic stress on cyberloafing through self-control as a mediating variable for training participants at BLK Karanganyar. This research uses quantitative methods by distributing questionnaires (e-questionnaires) and statistical or computational methods using SmartPLS (Partial Least Square) software with Structural Equation Modeling (SEM) equation models. This research was conducted on 117 samples who were training participants at BLK Karanganyar in 2023 Young Graphic Designer Training Program and Position GMAW Welding Plate Welder Training Program (3G/PF). The research results show that only descriptive norms were found to have a positive effect on cyberloafing, while academic stress and self-control were found to have no effect. However, in terms of self-control, academic stress was found to have a negative effect on participants’ self-control. Meanwhile, the mediating variable results of self-control succeeded in mediating the relationship between academic stress and cyberloafing.

Keywords: Cyberloafing, descriptive norms, academic stress, self-control

INTRODUCTION

The internet is a necessity for humans to find out information and run their work smoothly. One place that requires an internet network is a training center such as a Job Training Center (BLK). The existence of BLK aims to complement soft skills and character education in certain educational institutions with additional skills or hard skills(Nuraeni et al., 2022).

Apart from having a positive impact on making activities easier, it turns out that the internet also has a negative impact. One of the negative impacts of the internet is its use to carry out activities that are not related to training and work. These activities, such as using internet facilities to surf social media, reading online newspapers and so on, are known as cyberloafing. Cyberloafing behavior is usually carried out by playing social media (social media), such as: WhatsApp (WA), Facebook (FB), Instagram (IG), and Twitter(Nikolay et al., 2022). This activity can reduce performance because it is an activity that wastes time, is detrimental to the workplace, and reduces social interaction between workers(Ngowella et al., 2022).

Theoretically, the activities and behavior of employees who carry out cyberloafing activities every working day reach approximately 2 hours(Andel et al., 2019). Cyberloafing behavior can also be referred to as an unproductive activity
during working hours and can cause various negative impacts. Even though this behavior is considered unproductive, many workers and students still carry out this activity. Therefore, it is not surprising that cyberloafing behavior is considered a normal thing to do during breaks, breaks and during free time such as changing class hours. One way and solution to avoid this behavior is to create special rules at the training site. These rules include a ban on the use of cell phones during class hours, job enrichment and training to reduce various problems at training sites (Giordano and Mercado, 2023).

Based on previous research, cyberloafing behavior is motivated by boredom, stress, and a lack of strict descriptive norms that apply. This background can be controlled if each individual training participant has optimal self-control so that they can focus on achieving the expected training goals. Academic stress is conditions when training participants react in the form of behavior or emotions due to academic demands (training) or anything related to teaching and learning activities (Hamrat et al., 2019). Meanwhile, descriptive norms relate to individual perceptions about things that are generally done by other people, thereby encouraging someone to do the same thing and consider it normal (Irta et al., 2021). This usually happens in a community or certain social circles in society.

Based on the background above, it is necessary to study the relationship between cyberloafing behavior carried out by training participants at BLK Karanganyar on academic stress and descriptive norms. Apart from that, it is also necessary to study the influence of self-control as a mediating variable which is related to cyberloafing behavior, academic stress, and descriptive norms.

LITERATURE REVIEW

The Influence of Descriptive Norms on Cyberloafing

Descriptive norms are rules or regulations that only describe what most people do in certain conditions and situations. Given the greater predictive power of descriptive norms over prescriptive norms. Therefore, previous researchers consider that descriptive norms are strong candidates for subjective norm variables (Askew et al., 2010; Askew et al., 2011; Askew et al., 2014; Sheikh et al., 2015). Karabiyik et al. (2021) stated that subjective norms can significantly predict cyberloafing. This is in line with research by Khoirunnisa and Dahlan (2019) with 130 respondents from the Yogyakarta Special Region Education, Youth and Sports Department employees who stated that Role Conflict had an influence on Cyberloafing.

H1: Descriptive norms have a significant effect on cyberloafing

The Effect of Academic Stress on Cyberloafing

Research by Hamrat et al. (2019) regarding the impact of academic stress and cyberloafing on smartphone addiction, concluded that academic stress has a positive and significant influence on both cyberloafing and smartphone addiction. Grashinta et al. (2022) conducted research on stress and academic procrastination in cyberloafing students and came to the conclusion that overall academic stress plays a
positive role in academic procrastination in cyberloafing students. The results of another study conducted by Wu et al. (2020) concluded that social cyberloafing can cause fatigue and decreased mental health if it consumes resources.

H2: Academic stress has a significant effect on cyberloafing

The Effect of Self-Control on Cyberloafing

Self-control is an individual's skill in being sensitive to reading one's situation and the environment, as well as the ability to control and manage behavioral factors in accordance with the situation and conditions to present oneself in socializing the ability to control one's behavior (Harahap, 2017). Self-control is strongly influenced by externally justified habits and behavior, such as using the internet during learning (cyberloafing). Travis Hirschi and Michael Hindelang (2004): Hirschi and Hindelang put forward social control theory which focuses on factors that influence an individual's level of self-control. Some indicators of self-control according to them include affective ties (an individual's level of familiarity and attachment with others), commitment to social norms, participation in structured social activities, and individual beliefs in social norms.

H3: Self-control has a significant effect on cyberloafing

The Influence of Descriptive Norms on Self-Control

Descriptive norms refer to the rules or expectations that exist in society and inform about behavior that is generally carried out or acceptable (Kelley, 1995). Self-control refers to a person's ability to control and regulate himself in terms of behavior and decisions. Descriptive norms can influence a person's self-control in several ways. First, when someone realizes that the behavior they carry out is not in accordance with existing norms in society, this can affect their self-control. For example, if the societal norm is not to smoke in public places, someone who smokes may feel social pressure or feel that they lose self-control when engaging in this behavior. Second, self-control is needed to follow social norms/rules/expectations. For example, in Amber DeBono's (2011) research, individuals who had little self-control tended not to say thank you, but in contrast to individuals who had full self-control, they politely and clearly said thank you. These findings show that descriptive norms can influence a person’s self-control.

H4: Descriptive norms have a significant effect on self-control

The Effect of Academic Stress on Self-Control

Academic stress is a form of pressure that arises in educational and academic contexts such as pressure to achieve high results, heavy workloads, competition with classmates, and so on. Self-control refers to a person's ability to control and regulate himself in terms of behavior and decisions. Academic stress can affect a person's self-control in several ways. The relationship between the two is that when someone experiences high academic stress, they can experience a decrease in their ability to control themselves. Too much stress can cause physical and mental health problems, reduce self-esteem and can affect students' academic performance (Al-Gamal,
Academic stress can affect a person's level of self-control. Conversely, self-control also influences how a person reacts to stress. Students with high self-control have a better ability to deal with stress (Galla and Wood, 2015). For example, someone experiencing high levels of academic stress may forget important assignments, have difficulty concentrating, or tend to avoid challenging assignments. For example, in research conducted by Hashem (2019) the research subjects were 180 nursing students. This research has proven that there is a very statistically significant relationship and a negative correlation between academic stress and self-control among Nursing Faculty students.

**H5: Academic stress has a significant effect on self-control.**

The Effect of Descriptive Norms on Cyberloafing Through Self-Control

Study about Self-Control and Cyberloafing Behavior was researched by Muhammad and Malau (2022) which was carried out on 349 Generation Z employees with the conclusion that self-control can influence cyberloafing. This agrees with research by Arif et al. (2022) also stated that cyberloafing behavior fundamentally influences work productivity and self-control can influence work productivity among employees of the East Java Province Animal Husbandry Service. Muhtarom et al (2021) also conducted research with the following conclusions: locus of control, organizational commitment and cyberloafing behavior have a simultaneous influence on the performance of PERUMDA BPR employees. Lamongan Regional Bank. Based on this description, apart from descriptive norms, the self-control of each individual also influences cyberloafing behavior indirectly.

In research conducted by Andel (2019), Ahmad & Zoharah (2017) with the research subjects being employees, business-management graduate students referred to cyberloafing behavior against norms within the company and its correlation with each individual's gender self-control. The research concluded that regardless of age, employees were involved in cyberloafing and men were more involved in cyberloafing than women. Gender differences in cyberloafing are explained in self-control theory. Employee involvement in cyberloafing has significant implications for employers because this has become a common employee problem in an organization. This implies the need for organizations, rules or norms as well as self-control training to monitor employee internet use and detect illegal use to overcome this problem.

**H6: Self-Control Mediates between Descriptive Norms towards Cyberloafing**

The Effect of Academic Stress on Cyberloafing Through Self-Control

Cyberloafing behavior is influenced by academic stress and descriptive norms. Apart from that, these factors cannot be separated from the self-control of each individual. Self-control mediates or mediates academic stress and descriptive norms for individuals to carry out cyberloafing and consider this behavior to be commonplace even in class.

Based on several definitions previously explained regarding academic stress, self-control and cyberloafing. These three things are also related, in that
academic/educational pressure can influence cyberloafing behavior, but the magnitude of this behavior is also influenced by each individual's self-control. It can be said that academic stress can influence cyberloafing through self-control. For example, when someone experiences academic stress, they may tend to look for ways to escape from that stress and seek out enjoyable sources of entertainment. One common form of escapism is cyberloafing, namely spending time unproductively on the internet such as accessing social media, playing online games, or watching videos.

However, a person's ability to control themselves in the face of academic stress may influence the extent to which they engage in cyberloafing activities. Self-control is a person's ability to regulate and restrain themselves from instant desires or unproductive distractions. Research conducted by Zhou (2021) states that students with high self-control are less likely to cyberloaf regardless of the cause of academic stress, in contrast to students who lack self-control. These findings suggest that cyberloafing may fluctuate over time, especially for individuals who lack self-control. The explanation from several studies and examples above can be concluded that academic stress can influence cyberloafing through its influence on a person's level of self-control. The higher the level of academic stress, the lower the possibility that someone will have high self-control in avoiding cyberloafing. Based on these reasons, a hypothesis can be written that:

H7: Self-Control Mediates Between Academic Stress and Cyberloafing

RESEARCH METHODS

This type of research is quantitative research using structured data with statistical or computational methods with sources. Primary data comes from collecting respondents' answers via electronic questionnaires containing written questions as a survey on the group designated as the sample in the research. This research was used to see the relationship between descriptive norms and academic stress on cyberloafing intentions using the mediating variable self-control in training participants at the Karanganyar Regency Job Training Center UPT.

Research Sample

The sample and population in this study were 128 people from the 2023 BLK Karanganyar training participants, consisting of 64 participants in the Young Graphic Designer Training program and 64 participants in the Plate Training program, Welder Positional GMAW Welding (3G/PF).

Place and time of research

The research location is at the Karanganyar Regency Job Training Center UPT office, Jl. Raya Solo Tawangmangu KM 24, Bangsri, Karangpandan, Karanganyar, 57791. This research was conducted for 6 months from October 2023 to March 2024 starting from observation, collecting primary and secondary data to producing data results and research conclusions.
Data analysis method

The data analysis technique in this research uses Partial Least Square (PLS) with Structural Equation Modeling (SEM) using a variance-based approach or component-based structural equation modeling, aside from that descriptive statistical tests, Measurement Model Tests or Outer Models, and Structural Model Tests or Inner Models were carried out. The Measurement Model or Outer Model test consists of a convergent validity test, discriminant validity test, and reliability test with Cronbach’s Alpha and Composite Reliability. Meanwhile, the Structural Model or Inner Model Test consists of the R-Square, F-Square, Estimate for Path Coefficients and Indirect Influence Tests.

RESULTS AND DISCUSSION

This research data comes from competency-based training participants in 2023 at the UPT Job Training Center (BLK) Karanganyar Regency. There were 128 participants who took part in this activity. A total of 128 questionnaires were distributed in this study and 117 questionnaires were returned. The following is the demographic data of respondents:

Table 1. Demographic Data of Respondents

<table>
<thead>
<tr>
<th>Demographic Data</th>
<th>Category</th>
<th>Σ</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Man</td>
<td>90</td>
<td>76.92</td>
</tr>
<tr>
<td></td>
<td>Woman</td>
<td>27</td>
<td>23.08</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>117</td>
<td>100.00</td>
</tr>
<tr>
<td>Education</td>
<td>junior high school</td>
<td>2</td>
<td>1.71</td>
</tr>
<tr>
<td></td>
<td>high school</td>
<td>81</td>
<td>69.23</td>
</tr>
<tr>
<td></td>
<td>Diploma (D1/D2/D3)</td>
<td>16</td>
<td>13.68</td>
</tr>
<tr>
<td></td>
<td>Bachelor/Master (S1/S2)</td>
<td>18</td>
<td>15.38</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>117</td>
<td>100.00</td>
</tr>
<tr>
<td>Age</td>
<td>&lt; 25 Years</td>
<td>78</td>
<td>66.67</td>
</tr>
<tr>
<td></td>
<td>26 – 35 Years</td>
<td>29</td>
<td>24.79</td>
</tr>
<tr>
<td></td>
<td>36 – 45 Years</td>
<td>8</td>
<td>6.84</td>
</tr>
<tr>
<td></td>
<td>46 – 55 Years</td>
<td>2</td>
<td>1.71</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>117</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Descriptive statistics

Table 2 Statistical Description

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (μ)</th>
<th>Std. Deviation (σ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyberloafing</td>
<td>2.50</td>
<td>1.20</td>
</tr>
</tbody>
</table>
The cyberloafing variable is described in three indicators including activities, behavior and attitudes. Based on table 1, it can be seen that the majority of respondents "disagree" with cyberloafing activities and behavior. However, interestingly, the majority of respondents "agree" with the cyberloafing attitude. This shows that the level of cyberloafing among BLK respondents is quite low.

Meanwhile, the academic stress variable shows that the majority of respondents do not feel any academic stress on themselves. Likewise, the descriptive norm variable shows that the participant's descriptive norm level is quite low, while the self-control variable shows that the participant's level of self-control is quite high.

**Testing Research Instruments**

1. **Convergent Validity Test**

   Testing the validity of the research instrument was carried out using factor analysis. Which item used in the research are items that have a factor loading value > 0.7.

2. **Discriminant Validity Test**

   The discriminant validity test can be seen from the AVE value. The model is said to be good if the AVE of each construct is greater than 0.50.

**Table 3. Discriminant Validity Test Results**

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>AVE value</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cyberloafing(Y)</td>
<td>0.602</td>
<td>Valid</td>
</tr>
<tr>
<td>2</td>
<td>Descriptive Norms (X1)</td>
<td>0.570</td>
<td>Valid</td>
</tr>
<tr>
<td>3</td>
<td>Academic Stress (X2)</td>
<td>0.574</td>
<td>Valid</td>
</tr>
<tr>
<td>4</td>
<td>Self Control (Z)</td>
<td>0.541</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Based on table 3, the AVE value obtained is greater than 0.50 for all variables. Therefore, all variables are declared to have met the requirements for discriminant validity.

3. **Reliability Test**

**Table 4. Reliability Test Results**

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Cronbach's Alpha</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cyberloafing(Y)</td>
<td>0.916</td>
<td>Reliable</td>
</tr>
</tbody>
</table>
Based on table 4, the Cronbach's Alpha value obtained is more than 0.70 for all variables. Therefore, the variables in this study are declared reliable.

4. Inner Model Testing

Table 5. F-Square Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cyberloaing</th>
<th>Self control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Control (KD)</td>
<td>0.010</td>
<td></td>
</tr>
<tr>
<td>Descriptive Norms (ND)</td>
<td>0.388</td>
<td>0.000</td>
</tr>
<tr>
<td>Academic Stress (SA)</td>
<td>0.004</td>
<td>0.150</td>
</tr>
</tbody>
</table>

Based on table 5, it can be concluded that the overall relationship between variables in the model is in the weak category, except for the relationship between descriptive norms and cyberloafing which is in the medium range.

Table 6. F-Square Test Results

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</tbody>
</table>

Based on table 6, it can be concluded that the overall relationship between variables in the model is in the weak category, except for the relationship between descriptive norms and cyberloafing which is in the medium range.

5. Direct Effect Test

This test was carried out to see the magnitude of the direct influence value between the independent variable and the dependent variable. This test was carried out using the bootstrapping method using smartPLS 3.0.

Table 7. Direct Effect Test Results

<table>
<thead>
<tr>
<th>Direct Effects</th>
<th>Original Sample</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND -&gt; C</td>
<td>0.541</td>
<td>6.964</td>
<td>0.000</td>
<td>H1 Accepted</td>
</tr>
<tr>
<td>SA -&gt; C</td>
<td>0.062</td>
<td>0.595</td>
<td>0.552</td>
<td>H2 Rejected</td>
</tr>
<tr>
<td>KD -&gt; C</td>
<td>-0.089</td>
<td>0.873</td>
<td>0.383</td>
<td>H3 Rejected</td>
</tr>
<tr>
<td>ND -&gt; KD</td>
<td>-0.001</td>
<td>0.006</td>
<td>0.995</td>
<td>H4 Rejected</td>
</tr>
</tbody>
</table>
6. Indirect Effect Test

This test was carried out to see the magnitude of the indirect influence value between variables.

Table 8. Indirect Effect Test Results

<table>
<thead>
<tr>
<th>Indirect Effects</th>
<th>Original Sample</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND -&gt; KD -&gt; C</td>
<td>0.000</td>
<td>0.004</td>
<td>0.997</td>
<td>H6 Rejected</td>
</tr>
<tr>
<td>SA -&gt; KD -&gt; C</td>
<td>0.034</td>
<td>0.756</td>
<td>0.450</td>
<td>H7 Accepted</td>
</tr>
</tbody>
</table>

DISCUSSION

Based on table 7, there is only one variable that has a direct influence on cyberloafing, namely descriptive norms with P = 0.000 < 0.05. Meanwhile, the variables self-control and academic stress were found to have no effect (P = 0.383; P = 0.552). Apart from that, there is only one variable that has a direct effect on self-control, namely academic stress (P = 0.000 < 0.05), while the descriptive norm variable on self-control was found to have no effect (P = 0.995 > 0.05). However, interestingly, self-control was found to have no effect on cyberloafing even though academic stress had an effect on self-control.

The results of data analysis show that the descriptive norm variable has a significant effect on cyberloafing with a p-value of 0.000, less than 0.05 and a positive coefficient value of 0.541. These results explain that descriptive norms have proven to have a significant positive effect on cyberloafing of Karanganyar Regency BLK training participants. The higher the descriptive norms possessed by Karanganyar Regency BLK training participants, the higher their potential for cyberloafing. These findings also indicate that many participants consider cyberloafing to be normal. Therefore, high descriptive norms actually have a negative effect on participants' cyberloafing. These findings are in accordance with research Khoirunnisa and Dahlan (2019) and Karabiyik et al. (2021). Khoirunnisa and Dahlan (2019) stated that Role Conflict influences Cyberloafing. Meanwhile, Karabiyik et al. (2021) found that subjective norms can significantly predict cyberloafing.

From Table 7 the data shows that the academic stress variable has a significant effect on self-control with a p-value of 0.000 less than 0.05 and a negative coefficient value of 0.384. These results explain that academic stress has proven to have a significant effect on the self-control of Karanganyar Regency BLK training participants. The negative coefficient value indicates that the higher the academic stress experienced by the Karanganyar Regency BLK training participants, the lower the potential for self-control they have. Participants who experience high academic stress may have low self-control. They cannot control themselves due to the stress they have. These findings are supportive Hashem (2019) that there is a very
statistically significant relationship and a negative correlation between academic stress and self-control.

Meanwhile, based on the indirect influence test in table 8, no indirect influence was found for the self-control variable, both in the relationship between descriptive norms and cyberloafing (P = 0.997 > 0.05), while academic stress on cyberloafing through self-control showed a positive value of 0.034. The p-value results show a value of 0.450 which is greater than 0.05. However, the p-value is smaller than the direct effect of academic stress on cyberloafing (P = 0.552). These results indicate that self-control successfully mediates the effect of academic stress on cyberloafing. These results indicate that self-control succeeded in partially mediating the influence of academic stress on cyberloafing. This finding is in line with Zhou (2021) that individuals with high self-control traits are less likely to engage in cyberloafing, regardless of academic stressors and inversely proportional to individuals with less self-control.

CONCLUSION

This research used a survey method which was distributed to 128 Karanganyar Regency BLK training participants with data returned from 117 respondents. The data analysis technique was carried out using Partial Least Square – Structural Equation Modeling (PLS-SEM). Before carrying out data analysis, outer and inner model testing is carried out to ensure that the data is free from bias. Based on the results of data analysis, only the descriptive norm variable had a significant positive effect on the cyberloafing intensity of Karanganyar Regency BLK training participants, while self-control and academic stress were found to have no effect. These findings show that the higher the participants’ descriptive norms, the higher their potential for cyberloafing. These findings also indicate that many participants consider cyberloafing to be normal. Therefore, high descriptive norms actually have a negative effect on participants’ cyberloafing.

Furthermore, regarding self-control, only one variable was found that had an effect on self-control, namely academic stress, which was found to have a significant negative effect. Meanwhile, descriptive norms were found to have no effect on self-control. The higher the academic stress experienced by the participants, the lower the self-control they have and vice versa. However, in the indirect effect, self-control was unable to mediate the influence of descriptive norms and academic stress on cyberloafing intensity. This means that even if the participant’s self-control is good, it will not have a significant impact on the participant’s potential cyberloafing intensity.

The limitations of this research are 1) This research was only conducted at one BLK, namely BLK Karanganyar Regency. Therefore, the number of respondents obtained is considered minimal, so the research results cannot be interpreted in general. 2) This research did not control participants’ intrinsic factors, such as participants’ motivation and psychology. Therefore, it is very possible that these factors are the reason why several variables in this study do not have a direct effect.
Based on the limitations of this research, suggestions that can be made by further researchers are: Further research can expand the sample by conducting research on several BLKs to increase the number of samples, include new variables such as intrinsic factors of participants which have not been accommodated directly in this research and can consider using Experimental method to determine the level of influence of self-control factors, descriptive norms, and academic stress on cyberloafing. This method can also be done by comparing participants' intrinsic and extrinsic factors that have not been accommodated in this research.

DEDICATION

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