# Cyberloafing Scale in Academic Settings

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**ABSTRACT:** Cybrloafing in academic settings refers to students' use of the internet for non-academic purposes during lectures, which can disrupt the learning process. This study aims to develop and validate the Academic Cyberloafing Scale to measure this behavior among students. Methods: The scale was developed based on the theory of Akbulut et al. (2016) and initially consisted of 56 items. Content validity testing was conducted through expert judgment (CVI and CVR analysis), followed by item discrimination and reliability testing. A sample of 45 college students participated in the item discrimination test, and the reliability test was conducted using Cronbach's alpha. Results: The validation process resulted in 31 valid items with high reliability (Cronbach's alpha = 0.957). Conclusion: The validated Academic Cyberloafing Scale provides a reliable measurement tool for assessing cyberloafing behavior among students. The study highlights the need for universities to implement strategies to manage internet use during lectures and minimize its negative effects on learning.

**KEYWORDS:** Academic settings, Cyberloafing, Student Behavior

## INTRODUCTION

Cyberloafing was initially found in employees. The term cyberloafing was first put forward by Lim (2002) as employees who use the internet for purposes unrelated to work while working which is included in employee deviant behavior. Lim (2002) also explained that other terms used for internet use that are not related to learning can be called cyberloafing, cyberslacking, and junk computing. According to Henle & Blanchard (2008), cyberloafing is the use of the internet and office email that is not related to work intentionally done by employees while working. In addition, Askew (2012) defines cyberloafing as a form of employee behavior that uses organizational internet access using personal or company-owned gadgets while working for non-destructive activities, where the employee's supervisor or superior does not consider the behavior to be related to work.

Cyberloafing is not only found in employees but cyberloafing is also found in the academic field which is better known as academic cyberloafing. In the context of lectures, academic cyberloafing is a term used to describe the use of the internet for purposes unrelated to lectures, which is carried out during lectures (Yilmaz et al., 2015).

Many students use internet access during lecture hours for non-academic purposes. Prasad et al. (2010) said that cyberloafing in an academic setting involves students using internet facilities either provided by the campus or personal internet during lectures in class. The impact of this behavior is the disruption of the learning process because students are distracted from their focus on obtaining the material taught by the lecturer.

Cyberloafing behavior in education refers to the fact that students use the internet during class hours for things that are not relevant to the course (Arabaci, 2017). Academic cyberloafing can be defined as the behavior of students who tend to use internet access for activities that are not related to their learning tasks (Gökçearslan et al., 2018).

According to Taneja et al. (2015), cyberloafing develops in academic settings, especially in the world of lectures where most students access the internet during lecture hours for non-academic purposes. This behavior causes disturbances such as diverting focus on students in receiving material delivered by lecturers. According to Akbulut (2016) deviations in student behavior in using the internet, namely the emergence of negligent behavior in using it for purposes unrelated to learning in students known as academic cyberloafing.

Aspect of Academic Cyberloafing

The aspects of academic cyberloafing that are used as a reference in creating this scale use the theory according to Akbulut et al. (2016), namely:

1) Sharing

The sharing aspect includes activities where individuals spend time on the internet to interact with content shared by others. This aspect can be observed through indicators of checking posts on social media, providing comments, or watching uploaded videos.

This activity often distracts students from their academic tasks, because they are trapped in online social interactions that seem more interesting, easy access to social media platforms, students can be distracted from their focus on learning, thereby reducing academic productivity. 2) Shopping

Online shopping activities are one form of significant cyberloafing. The indicators, for example, often visit online shopping sites or banking platforms to make transactions, to the point of wasting valuable time that should be used for other positive things. This tendency not only interferes with concentration, but can also lead to wasting money, especially if they are trapped in tempting offers or discounts. Online shopping can be a distraction that interferes with the learning process, especially when academic tasks pile up.

3) Real-time updating

The real-time updating aspect can be observed through indicators of social media usage to share current conditions and provide comments on trending news or events, to the point where individuals are trapped in a cycle of information that continues to develop, making it difficult to focus on other things. Although sharing information can increase social connectedness, too much time spent following current discussions can reduce the time that should be allocated to do other things.

4) Accessing online content

The aspect of accessing online content can be observed from the behavior of accessing the internet with the aim of streaming videos or listening to music online (streaming). 5) Gaming and gambling

Gaming and gambling activities are also included in cyberloafing, which can be observed from the time spent playing games or engaging in online betting. This tendency can be very disturbing, especially if students spend hours playing games rather than completing academic tasks. In addition, gambling can carry financial and emotional risks, which can interfere with students' overall well-being. These gaming and gambling activities not only distract from academics but can also have negative consequences in everyday life.

## MATERIALS AND METHODS

Prosedure and Partisipant

The compilation of this scale was carried out twice for feasibility testing. The first test was carried out by CVI (Content Validity Item) the scale items that had been compiled were assessed by panelists through expert judgment. Expert judgment consisted of 12 people who assessed, this result was carried out based on a comparison of the Aiken v value to determine whether the items that had been compiled had clarity, relevance and suitability by considering the indicators of each variable. The second test was conducted by item discrimination testing conducted on 45 college students then the results were calculated based on the correlation coefficient value between the distribution of item scores and the distribution of the scale scores themselves to produce a total item correlation coefficient. The corrected item correlation index total of at least 0.30 is considered satisfactory.

Measure

Academic cyberloafing scale is compiled based on the theory of Akbulut et al. (2016) as many as 56 items. then a feasibility test was carried out with an expert judgment assessment. The assessment scale chosen consists of 'very good' with a score of 4, 'good' with a score of 3, 'sufficient' with a score of 2 and 'less' with a score of 1. The reference value used to see a valid item when having 12 panelists with 4 raters is 0.69 with a 5% error rate and based on the results obtained there were several items that passed with improvements so that further improvements were made. Then the following test was the testing of items distributed to 45 students in the form of a Likert scale consisting of 5 points, namely: 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree. Based on the results, 31 valid items and 25 invalid items were obtained from the initial 56 items.

**Blueprint the distribution of Academic Cyberloafing items scale**

| No | Aspects | Indicator | Item Number | | Amount |
|----|---------|-----------|-------------|---|--------|
| | | | **Favorable** | **Unfavorable** | |
| 1 | Sharing | a. Viewing content (photos/videos) and personal data on friends' social media accounts | 1, 2 | 3, 4 | 4 |
| | | b. Sharing and updating personal and public content on social media | 5, 6 | 7, 8 | 4 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | c. | Write on column commentin social media and like friends' posts during lecture hours | 9, 10 | 11, 12 | 4 |
| | | d. | Linking /bookmarking friends in Photo Which in share in media social | 13, 14 | 15, 16 | 4 |
| 2 | Shopping | a. | Visiting and shopping through the application shopping *on line* | 17, 18 | 19, 20 | 4 |
| | | b. | Use service bank *on line* (e-banking ) | 21, 22 | 23, 24 | 4 |
| 3 | Real-time Updating | a. | Share return ( *repost* ) on social media and give *likes* to the content Which shared by friends | 25, 26 | 27, 28 | 4 |
| | | b. | Read and post status on media social | 29, 30 | 31, 32 | 4 |
| | | c. | Commenting on *trending topics* in social media | 33, 34 | 35, 36 | 4 |
| 4 | Accessing On line Content | a. | Download music, movies or videos through free sites or paid | 37, 38 | 39, 40 | 4 |
| | | *b.* | Watching movies or videos through site watch *on line* | 41, 42 | 43, 44 | 4 |
| | | *c.* | Listening to music through *online* application | 45, 46 | 47, 48 | 4 |
| 5 | Gaming and gambling | a. | Visiting *online betting sites and performing online gambling actions* | 49, 50 | 51, 52 | 4 |
| | | b. | Play *games on line* | 53, 54 | 55, 56 | 4 |
| | Amount | | | 28 | 28 | 56 |

## RESULT

Result Content Validity Test

**Results of the Content Validity Test of the Academic Cyberloafing Scale**

| Assessment Aspects | CVI | CVR | Standart CVR | Significant |
|---|---|---|---|---|
| **Clarity** | 0,86 s/d 1,00 | 0,960 | 0,69 | 0,046 |
| **Relevance** | 0,89 s/d 1,00 | 0,952 | 0,69 | 0,046 |
| **Suitability** | 0,81 s/d 1,00 | 0,949 | 0,69 | 0,046 |

Result Item Discrimination Test

**Results Discrimination Test for Academic Cyberloafing Scale Items**

| Initial Number of Items | Analysis Round | Number of Items Remaining | Item Number Dropped | Information |
|---|---|---|---|---|
| 56 | 1 | 32 | 4, 8, 9, 12, 15, 17, 19, 23, 24, 27, 28, 30, 31 39, 40, 42, 43, 44, 48, 50, 52 dan 56 | The index corrected item total correlation 35, 37 moved from -0.129 to 0.724. |
| 32 | 2 | 31 | 20 | The index corrected item total correlation moved from 0.226 to 0.791. |
| 31 | 3 | 31 | - | The index corrected item total correlation moved from 0.411 to 0.801. |

*Source: SPSS Version 26 Output*

Result Reliability Test

**Result the Reliability Test of Academic Cyberloafing scale**

| Initial Number of Items | Analysis Round | Item Number valid | Item Number Dropped | Reliability |
|---|---|---|---|---|
| 56 | 1 | 32 | 24 | 0,920 |
| 32 | 2 | 31 | 1 | 0,956 |
| 31 | 3 | 31 | - | 0,957 |

*Source: SPSS Version 26 Output*

## DISCUSSION

Contennt Validity Item Test

Based on the summary of the analysis results with the CVI and CVR academic cyberloafing scale from the clarity aspect, the CVR value is 0.960 and the CVI value is towards 0.86 to 1.00, which means that the item has validity in the clarity aspect. Then in the relevance aspect, the CVR value is 0.952 and the CVI value moves from 0.89 to 1.00, which means that the average item has a relevance aspect. Then in the suitability aspect, the CVR value is 0.949 and the CVI value moves from 0.81 to 1.00, which means that the average item has a suitability aspect.

Item Discrimination Tes

Item discrimination power testing is done by calculating the correlation coefficient between the item score distribution and the scale score distribution itself to produce a total item correlation coefficient. The total corrected item correlation index of at least 0.30 is considered satisfactory.

Based on the results of the item discrimination test conducted on 45 trial respondents using an item discrimination index of 0.3, in the first round there were 24 items that had a total item correlation index value of ≤ 0.3, namely items number 4, 8, 9, 12, 15, 17, 19, 23, 24, 27, 28, 30, 31, 35, 37 39, 40, 42, 43, 44, 48, 50, 52 and 56. In the second round, there was 1 item that had a Total Item Correlation Index value of ≤ 0.3, namely item number 20. In the third round, all items had a total item correlation index value of ≥ 0.3, so that the total remaining items in the third round were 31 items with item discrimination coefficients ranging from 0.411 to 0.801.

Reliability Test

Reliability is an index that shows the extent to which a measuring instrument can be trusted and relied upon. According to Azwar (2018), reliability is the extent to which measurement results remain consistent when re-measured with the same measuring instrument with the research scale items considered reliable by considering the Cronbach's alpha value> 0.80 with the assumption that the closer the value is to one (1,000), the more reliable the item is and vice versa. The results of the reliability test on the academic cyberloafing scale using SPSS 26 for windows with the Cronbach's alpha method showed 0.920 in the first round with 56 scale items tested. The second round of analysis with 32 valid items showed a Cronbach's alpha value of 0.956. In the third round of analysis with 31 valid items, the Cronbach's alpha value was 0.957. This means that the academic cyberloafing scale is proven to be reliable.

The use of internet facilities on campus while studying in class or while on campus can make students ignore other people, be it lecturers or friends (Fauzan, 2018). Cyberloafing in students according to Akbulut (2016) is a deviation in student behavior in using the internet, namely the emergence of negligent behavior in using it for purposes unrelated to learning. According to cyberloafing, it develops in academic settings, especially in the world of lectures where most students access the internet during lecture hours for non-academic purposes (Taneja et al., 2015). This behavior causes disturbances such as diverting focus on students in receiving material presented by lecturers. Based on this, if cyberloafing behavior continues to be carried out by students while studying in class, this makes them ignore teachers and friends.

## CONCLUSION

Cyberloafing in an academic environment is the behavior of internet use by students for non-academic purposes during class hours, which can disrupt the learning process. Based on this study, cyberloafing has several main aspects, namely sharing, shopping, real-time updating, accessing online content, and gaming and gambling.

The development of the Academic Cyberloafing scale was carried out through content validity and item discrimination tests. The test results showed that this scale has high validity and reliability, with 31 valid items from a total of 56 initial items. The Cronbach's alpha reliability value reached 0.957, indicating that this scale can be trusted to measure students' cyberloafing behavior consistently. The impacts of cyberloafing include disruption in learning focus, reduced academic productivity, and the potential for phubbing behavior, which is the tendency to ignore others because of being too focused on digital devices. Therefore, a strategy is needed to manage internet use more wisely in an academic environment in order to improve learning effectiveness.

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