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Student Cyberloafing Behavior in the Learning Process: A Comparative Study

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ABSTRAK

Cyberloafing dalam proses pembelajaran adalah perilaku penggunaan internet pada jam belajar untuk kepentingan pribadi yang tidak berhubungan dengan pembelajaran. Hal ini perlu segera diatasi karena akan berdampak pada menurunnya motivasi, konsentrasi, prestasi bahkan kegagalan dalam belajar. Penelitian ini bertujuan untuk menganalisis perbedaan cyberloafing berdasarkan gender dan tingkat semester. Metode penelitian ini adalah deskriptif kuantitatif, jenis deskriptif komparatif dengan desain model faktorial. Populasi dalam penelitian ini adalah mahasiswa Bimbingan dan Konseling Pendidikan Islam yang berjumlah 185 orang, pengambilan sampel menggunakan total sampling. Alat pengumpul data yang digunakan dalam penelitian ini adalah skala cyberloafing dengan skala model likert sebanyak 45 item pernyataan yang valid dan tingkat reliabilitas instrumen skala cyberloafing mempunyai nilai Cronbach Alpha sebesar 0,742. Hasil penelitian ini menemukan bahwa tidak terdapat perbedaan yang signifikan tingkat cyberloafing pelajar antara laki-laki dan perempuan. Terdapat perbedaan yang signifikan tingkat cyberloafing mahasiswa semester II, IV dan VI. Terdapat interaksi antara variabel gender dan tingkat semester dalam menjelaskan cyberloafing mahasiswa.

ABSTRACT

Cyberloafing in the learning process is the behavior of using the internet during study hours for personal interests that are not related to learning. This needs to be addressed immediately because it will have an impact on decreasing motivation, concentration, achievement and even failure in learning. This study aims to analyze differences in cyberloafing based on gender and semester level. This research method is quantitative descriptive, comparative descriptive type with a factorial model design. The population in this study was 185 students of Islamic Education Guidance and Counseling, sampling using total sampling. The data collection tool used in this research is a cyberloafing scale with a Likert model scale of 45 valid statement items and the reliability level of the cyberloafing scale instrument has a Cronbach Alpha value of 0.742. The results of this study found that there was no significant difference in students' cyberloafing levels between men and women. There is a significant difference in the level of cyberloafing of students at semester levels II, IV and VI. There is an interaction between the variables gender and semester level in explaining student cyberloafing.

1. INTRODUCTION

The use of the internet by students in the 21st century has a very important role in supporting educational development and the progress of the younger generation. The internet provides unlimited access to educational resources, information and knowledge that can improve the quality of learning (Samerkhanova & Imzharova, 2018; Sjahruddin et al., 2022). Through the internet, students can access e-books, scientific journals, and interactive learning resources that support their learning process. In addition, the internet also facilitates communication between students and teachers, enabling collaboration and the global exchange of ideas (Irving, 2006; Setiawardhani, 2013; Zhampeissova et al., 2020). By using the internet, students can develop essential digital skills to face the demands of the modern world of work. However, it is important to teach how to use the internet wisely and responsibly so that students can avoid negative impacts, such as false information or misuse of technology (Fatimah & Santiana, 2017; Potter, 2018; Samerkhanova & Imzharova, 2018). Therefore, implementing internet use in

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an educational context can help students develop their potential optimally, stimulate creativity, and form a generation that is ready to face future challenges.

However, along with these benefits, it needs to be acknowledged that internet use also carries certain risks, one of which is the cyberloafing phenomenon. Students, despite having extensive access to information and online learning tools, can be tempted to engage in unproductive activities, such as surfing social media or playing online games, which can hinder their focus and productivity (Churchill, 2020; Kurt, 2019; Leung, 2014). Therefore, it is important to understand that while the internet can be a powerful tool for learning, its use must be directed wisely to keep students focused on their educational goals and personal development. Awareness of the risks of cyberloafing and efforts to manage internet use responsibly are the keys to optimizing the benefits of technology in education.

Cyberloafing is a new phenomenon discussed in the world of education that must be overcome immediately because, if ignored, it will have an impact on decreasing motivation, concentration, achievement and even failure in learning. Cyberloafing is common among college students (Durak, 2019; Özcan et al., 2017). Cyberloafing is a behaviour of accessing the internet during the learning process but is unrelated to academics (Akbulut et al., 2016; Lim & Chen, 2012). Cyberloafing during lectures is defined as excessive and irrelevant internet use by students that is unwittingly carried out during lessons. This is a cyberloafing behaviour in the classroom carried out by many students, such as communicating, watching movies and listening to music through their smartphones during lectures (Lim & Chen, 2012; Saritepeci, 2019). Bad habits of accessing various social media accounts during study hours, causing loss of concentration during the study process. Cyberloafing has a negative impact on the efficiency and productivity of learning activities in the educational environment is counterproductive and affects the effectiveness of performance , reduces students' active participation in learning activities loss of concentration on learning materials presented by teachers (Heflin et al., 2017; Ravizza et al., 2014; Yaşar & Yurdugül, 2013).

Based on a survey by APJII, internet users in Indonesia in 2021-2022 reached 03 million. The level of internet users in Indonesia in 2022 was 77.02%. Internet penetration is highest at the age of 13 to 18 at 99.16%. Furthermore, aged 19 to 34 years is 98.64% (APJII, 2022; Vitak et al., 2011). Based on this data, it can be seen that the highest internet penetration in Indonesia is teenagers and adults, including students. Previous studies have shown men's cyberloafing behaviour is found to be higher than that of women (Ahmad & Omar, 2017; Akbulut et al., 2016; Jia et al., 2013) Vitak et al., 2011; . On the other hand previous study found women have a higher rate of cyberloafing than men (Özkalp et al., 2012). Furthermore other study explained that there can be no difference in male and female cyberloafing (Çınar & Karcıoğlu, 2015). The inconsistency of previous s study results attracted researchers to conduct cyberloafing-related research on male and female students.

Furthermore, the factor influencing cyberloafing is age, previous studies found that the cyberloafing rate of younger generations is higher than older ages (Jia et al., 2013). However, other study found older ages cyberloafing more often than more youthful ages (Restubog et al., 2011). On the other hand, there are also studies found that there was no difference in cyberloafing at employee age levels (Ahmad & Omar, 2017; Ozler & Polat, 2012). Although previous studies have done the age factor, it needs to be seen again whether the age factor influences cyberloafing behavior in students which can be seen at the behavior level of the student.

Base on the problem and result of presvious study, this study aimed to analyze differences in cyberloafing based on gender and semester level, as well as the influence of cyberloafing behavior on the learning process. It is hoped that the results of this study can be an input for agencies and related parties to understand the impact of cyberloafing so that there is an improvement in the quality of learning.

2. METHOD

This research method is descriptive quantitative with comparative descriptive type with factorial model design (McCusker & Gunaydin, 2015; Wisdom & Creswell, 2013; Yusuf, 2016). A comparative study aims to compare data obtained from groups contained in the study population, namely differences in student cyberloafing in terms of gender and semester level. The population in this study is students majoring in Islamic Education Guidance and Counseling, Faculty of Tarbiyah and Teacher Training UIN Suska Riau semester II, IV, and VI, men and women. This is done because researchers will compare the number of students. Moreover, sampling using total sampling, the entire population is sampled. Data collection is carried out through administering instruments to students who are research samples. The data collection tool used in this study was a cyberloafing scale with a Likert model scale tested for validity with 45 valid items and the reliability level of the Cronbach Alpha Cronbach value cyberloafing scale instrument of 0.742. Therefore, it can be concluded that this research instrument is reliable.

3. RESULTS AND DISCUSSION

Result

Normality testing aims to test the assumption that the distribution of a sample is close to or follows the normality of the population. The normal state of the sample is critical because statistical use is required for hypothesis testing. The normality testing technique used in this study was Kolmogorov Smirnov. The results of the normality test of student cyberloafing data by gender can be seen in Table 1.

Table 1. Student Cyberloafing, Data Normality Test, Based on Male and Female Gender

Types of Schools	Kolmogorov-Smirnov			Information
	Statistic	Df	Sig	
Man	0.154	22	0.189	Normal
Woman	0.053	163	0.200*	Normal

Based on Table 1 shows that the normality test results of student cyberloafing data based on male sex were Sig. of 0.189 and female sex of 0.200*. Thus, it can be concluded that student cyberloafing data based on gender is usually distributed. The results of the normality test of student cyberloafing data based on gender can be seen in Table 2.

Table 2. Student Cyberloafing, Data Normality Test, Based on Semester Level

Types of Schools	Kolmogorov-Smirnov			Information
	Statistic	Df	Sig	
Semester II	0.070	65	0.200*	Normal
Semester IV	0.074	77	0.200*	Normal
Semester VI	0.071	43	0.200*	Normal

Table 2 shows that the results of the student cyberloafing data normality test based on the semester 2 level were obtained by Sig. of 0.200*, semester IV of 0.200*, and semester 6 of 0.200*. Thus, it can be concluded that student cyberloafing data based on semester levels is normally distributed. The results of the homogenity test of student cyberloafing data based on gender and semester level as a condition of the hypothesis test to be used in ANOVA can be seen in Table 3.

Table 3. Student Cyberloafing Data Homogeneity Test

Sample Group	Levene statistic	Df1	Df2	Sig	Information
Gender	0.519	1	182	0.472	Homogeneous
Semester Level	0.681	2	182	0.507	Homogeneous

Table 3 shows the results of the homogeneity test of student cyberloafing data based on gender obtained Sig. of 0.472, semester level 0.507. Thus, it can be concluded that student cyberloafing data based on all sample groups have identical or homogeneous variants. The results of hypothesis testing of sex variables (Male and Female) through variance analysis can be seen in Table 4.

Table 4. ANOVA Gender Score Data (Male and Female)

Sources of Variance	Sum Squares	Degrees of freedom	Mean Squares	$F_{calculate}$	Sig	Information
Male and Female	100.013	1	100.013	0.649	0.422	Insignificant

Based on Table 4, it can be understood that the results of hypothesis testing on male and female sex variables obtained a F calculate value of 0.649 at the degree of freedom (Df) 1 and obtained a Sig. Value of 0.422. Then, based on the criteria for hypothesis testing through ANOVA, which states, if the value of Sig. More petite than 0.05 means that there is a significant difference, so it can be concluded from the table above that there is no significant difference in the level of student cyberloafing between men and women. The results of testing the semester-level variable hypothesis (Semesters II, IV, VI) through variance analysis can be seen in Table 5.

Table 5. ANOVA Semester Level Score Data (Semester II, IV, VI)

Sources of Variance	Sum Squares	Degrees of freedom	Mean Squares	$F_{calculate}$	Sig	Information
Semester (II, IV, VI)	2480.207	2	1240.103	8.042	0.000	Significant

Based on Table 5, it can be understood that the results of hypothesis testing on semester 2, 4, and 6 level variables obtained a Fcalculate value of 8.042 at the degree of freedom (Df) 2 and obtained a Sig. Value of 0.000. Then, based on the criteria for hypothesis testing through ANOVA, which states if the value of Sig. More petite than 0.05 means there is a significant difference, so it can be concluded from the results of the table above that there is a significant difference in the cyberloafing rate of students at semester II, IV, and VI levels. The results of student cyberloafing data processing based on gender grouping and semester level were obtained from the results of interaction calculations through variance analysis, which can be seen in Table 6.

Table 6. Interaction Between Sex and Semester Level

Sources of Variance	Sum Squares	Degrees of freedom	Mean Squares	$F_{calculate}$	Sig	Information
Interaction of Gender Variables and Grade Levels	2310.683	2	1155.341	7.492	0.001	Insignificant

Based on Table 6, it can be understood that the results of processing interaction data between combined variables, namely the variables of school type and cultural background, obtained an Fcalculate value of 7.492, while Sig. At the degree of freedom (Df), 2 obtained a value of 0.001. Then, based on the criteria for hypothesis testing through ANOVA, which states if the value of Sig. More petite than 0.05 means there is an interaction, so from the table above, it can be concluded that there is an interaction between gender variables and semester level in explaining student cyberloafing.

Discussion

Based on the results of research that has been conducted on BKPI students. It can be seen that students carry out cyberloafing behavior in learning. Based on the study results, there was no significant difference in students' cyberloafing levels between men and women. There is a significant difference in the cyberloafing rate of students at semester levels. There is an interaction between gender variables and semester level in explaining student cyberloafing. Cyberloafing is using internet facilities during productive hours without relationship with activities. Cyberloafing has become a habit and an indisputable problem among students (Akgün, 2020; Hensel & Kacprzak, 2021). Often, students access the internet, not for learning Cyberloafing behavior carried out by students usually involves opening the internet to open social media, communicating with outsiders, opening online shop applications, making short videos and watching videos (Manusakerti & Purwoko, 2020; Toker & Baturay, 2021).

Several negative impacts occur on cyberloafing actors, especially on students, such as lack of concentration in learning, not understanding the explanation presented by lecturers, lack of interaction or activeness in class, to decreasing academic scores (Grashinta et al., 2022; Hamrat et al., 2019; Pranitasari et al., 2023). If left unchecked, this will have a much worse impact, and students will experience a far lag in learning. Previous study state student cyberloafing is influenced by situational factors, including psychological aspects, and tremendous academic pressure, so often, students carry out activities to divert attention to budget, becoming addicted (Nuha, 2021). In addition, several factors affect student cyberloafing, including low learning motivation, low self-control over the use of gadgets. Teacher evaluation, and lack of application of arrangements and norms in the teaching and learning process.

Based on the discussion above, it is feared that the high level of student cyberloafing will significantly impact the learning process during lectures. Therefore, researchers also analyzed the effect of cyberloafing on student learning. The results of the analysis that have been carried out are that there is a significant influence on the impact of student cyberloafing on learning. This is in line with research that has been conducted that the phenomenon of students in universities using campus internet access for personal interests during lecture hours can have a negative impact on learning (Pranitasari et al., 2023). Students who cyberloafing also tend to get poor test scores, experience a reduction in learning motivation, and shift their focus from learning materials to non-academic matters (Dereli & İzmirli, 2022; Grashinta et al., 2022; Hamrat et al., 2019).

The implications of this research can increase awareness among educators, parents and students themselves about the cyberloafing phenomenon. With a better understanding of these behaviors, stakeholders can take appropriate preventive and intervention steps. Apart from that, the research results can help in formulating more effective educational policies regarding internet use in the school environment. Schools and educational institutions can develop guidelines or rules that support responsible internet use. The results of this study may have limitations in generalization, especially if this research was only conducted at one institution or specific region. Certain contextual factors may influence research results. Moreover, internet use and student behavior can change over time. The results of this research may have limited relevance if not updated regularly.

4. CONCLUSION

This study found no significant difference in the cyberloafing rate of students between men and women. There is a substantial difference in the cyberloafing rate of students at semester levels. There is an interaction between gender variables and semester level in explaining student cyberloafing. Therefore, efforts need to be made to reduce cyberloafing among college students. Campus leaders, department heads, secretaries, and lecturers can do this. Other efforts that can be made are by carrying out counseling services supported by appropriate counseling approaches, using the internet in the learning process to be more focused on its use in learning, and implementing this counseling service can be done by BKPI lecturers in collaboration with Labor Guidance and counseling to reduce the negative impact of cyberloafing behavior in learning.

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