

# The Impact of Social Media on Academic Achievement of Open University (UT) Students

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#### Abstract

This study explores the impact of the intensity of social media use on the academic performance of UTstudents. In the digital era, social media is increasingly used for academic activities, including finding references and collaborating. However, there are concerns that social media can interfere with students' learning focus. This study used a quantitative method with a survey approach on 25 UT students in archival science. Intensity of social media use was measured through a questionnaire, while academic achievement was measured using Grade Point Average (GPA).Correlation results showed a very weak negative relationship between intensity of social media use and GPA (r = -0.206), but it was not statistically significant (p = 0.334). Regression analysis showed that only 4.2% of the variation in GPA could be explained by social media use, indicating that other factors have more influence on students' academic performance. Although the results showed a small negative impact, this study highlights that social media can be an effective tool for collaborative learning, supporting Albert Bandura's Social Cognitive theory. Academic self-efficacy was also identified as an important mediator in maximizing the benefits of social media for academic achievement. This study recommends that education authorities encourage the purposeful use of social media to support academic performance, especially in distance education contexts.

Keywords: Social Media, Academic Achievement, Distance Education

## 1. Introduction

In the digital era, the development of information and communication technology has changed various aspects of life, including education. According to We Are Social data in 2023, Indonesia has around 210 million social media users, making it one of the countries with the largest number of users in the world. A study by the Ministry of Education and Culture of the Republic of Indonesia in 2022 showed that 78% of students use social media for academic purposes, such as finding references, discussing course materials, and collaborating on group assignments.

At the Open University (UT), which implements a distance education system, social media offers opportunities and challenges for students in achieving academic performance. UT's self-directed learning system requires students to manage their time, learning resources, and course activities independently, without face-to-face interaction. Challenges such as lack of direct interaction with lecturers, limited learning support, and fluctuations in motivation often lead to academic problems. With the increasing use of social media, there are concerns that UT Archives DIV students' focus on their studies may be compromised, especially with the potential of social media as a distraction.





Students, especially UT students, are a very active group using social media, which has now become an integral part of their lives. According to Kandell (Kuss, Griffiths, and Binder, 2013), students are vulnerable to internet dependence compared to other groups, because they are in the emerging adulthood phase, which is the transition from late adolescence to young adulthood. Emotionally unstable conditions often make students vulnerable to misinterpreting information, which then encourages them to experiment with new things introduced through social media. As a result, behavioral changes in students can occur, both positive and negative.

On the one hand, social media makes it easier for students to exchange information, access online literature, and build virtual learning communities. However, the negative impact is dependency that has the potential to disrupt mindset and behavior, including students' ability to focus on their studies. In addition, the development of social media has now made it more than just a communication tool; it has become part of the lifestyle.

However, research in Indonesia is still limited in exploring the positive impact of social media on academic achievement in the context of distance education, particularly at UT. The majority of studies have highlighted the negative impacts, such as dependency, decreased learning concentration, and diversion of study time. Previous research also tends to focus on students in conventional universities with face-to-face interactions, thus creating a research gap in understanding the unique phenomenon that occurs in UT Archives DIV students.

The study by Muthmainnah Asmal and Akbar Taufik (2023) found that social media had a positive impact on students' academic performance at Pancasakti University Makassar, but this study did not cover the context of distance education. Syifaa Rabaani and Dian Indriyani (2024) also found that social media can have a positive impact, but the results vary depending on the context and population. Most of the previous studies focused on conventional universities, so they did not cover the dynamics at UT. In addition, the use of social media as a tool for collaborative learning is rarely discussed; whereas, in the UT context of minimal face-to-face interaction, social media can be an important tool for building learning communities and sharing resources.

This research aims to fill this gap by exploring how social media impacts the academic achievement of students in the Archives D IV Study Program at the Open University. It is hoped that this research can make an important contribution in understanding the role of social media as a tool in supporting academic achievement, especially in a distance education environment such as UT.

Social Cognitive Theory developed by Albert Bandura (2018) is very relevant in understanding how UT Archives DIV students utilize social media to support their academic performance. According to Bandura, most human learning occurs in a social context, where individuals learn through observation of others. Through this observation, humans acquire knowledge, rules, skills, strategies and beliefs. Individuals also observe models or examples of behavior to understand the usefulness and impact of these behaviors, and then act according to



their beliefs about their abilities and expected outcomes. This theory emphasizes the dynamic interaction between the individual, environment, and behavior known as reciprocal determinism.

In the context of UT, DIV Archives students not only learn independently but also interact socially through social media which affects their learning process. One of the main components of this theory is observational learning, where students learn by observing the behavior of others and the results of that behavior. UT students can use social media to see how their peers interact with course material, discuss assignments, or share learning resources. Through these observations, they can replicate effective learning strategies and adjust their behavior to achieve better results.

Social Cognitive Theory also highlights the importance of environmental factors in influencing behavior. UT Archives DIV students are in a unique learning environment where face-to-face interaction is limited. However, through social media, they can build virtual learning communities that enrich the academic experience. These interactions not only help in understanding the course material but also provide the emotional support needed to maintain learning motivation.

By integrating Social Cognitive Theory into research on the Impact of Social Media on the Academic Achievement of Open University (UT) Archives DIV Program Students, we can better understand how social interactions and cognitive processes influence each other in the context of distance education. This theory provides a strong framework for exploring how students can utilize social media as an effective learning tool, while addressing the challenges that arise from the distance learning model at UT.

## 2. Research Method

This study uses a quantitative approach with a survey method to explore the impact of the intensity of social media use on student academic achievement. This technique was chosen because it allows researchers to collect numerical data that can be analyzed statistically to measure the relationship between the variables studied. The independent variable in this study is the intensity of social media use, while the dependent variable is students' Grade Point Average (GPA). The population in this study were students of the DIV Archiving Study Program at the Open University.

The sampling technique used by purposive sampling is a method to ensure research illustrations with certain considerations aimed at making the information obtained later more representative (Sugiono, 2010), namely students who are actively involved in the use of social media and are willing to participate in this study. The number of samples used in this study was 25 students, according to the data obtained and analyzed. The instrument used to measure the intensity of social media use is a closed questionnaire consisting of a number of questions about the frequency, duration, and types of social media platforms used by students in daily activities, including for academic purposes. A Likert scale of 1-5 was used to measure the intensity of social media use, where a score of 1 indicates very low intensity and a score of 5 indicates very high



intensity. Student academic achievement is measured through the Grade Point Average (GPA) obtained from the student's academic data. This GPA value is the main indicator in assessing student academic achievement. Data were collected through distributing questionnaires online to students of the Open University Archives D IV Study Program who met the research criteria.

# **3.** Results and Discussions

In this study, the analysis technique used was Pearson correlation to see the relationship between the intensity of social media use and GPA, and Linear Regression Analysis to examine the effect of the intensity of social media use on student GPA to determine the impact of social media on the Academic Achievement of Open University (UT) Archives D IV Study Program Students.

		INTENSITY	GPA
INTENSITY	Pearson Correlation	1	206
	Sig. (2-tailed)		.334
	Ν	24	24
GPA	Pearson Correlation	206	1
	Sig. (2-tailed)	.334	
	Ν	24	24

Table 1	1.	Correl	ation	Anal	vsis
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Source: processed data

The Pearson Correlation value between the intensity of social media use and GPA is -0.206. This shows that there is a very weak negative correlation between the intensity of social media use and GPA. This means that the higher the intensity of social media use, the lower the GPA, although this correlation is very small. The significance (Sig. or p-value) of 0.334 indicates that the relationship is not statistically significant (p > 0.05), which means that the relationship between intensity of social media use and GPA may have occurred by chance in this sample.

Table 2. Model	Summary
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		R	Adjusted	Std. Error of the	R Square Change	F			Sig. F
Model	R	Square	R Square	Estimate	Chunge	Change	df1	df2	Change
1	.206ª	.042	001	.32362	.042	.976	1	22	.334
a. Predic	tors: (C	onstant), I	NTENSITY						

Source: processed data



Table 3. A	NOVA <sup>a</sup>
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		Sum of						
I	Model	Squares	df	Mean	Square	F	Sig	5.
	Regression	.102	1		.102	.976	.334	4 <sup>b</sup>
	Residuals	2.304	22		.105			
	Total	2.406	23					
a. Depen	dent Variable: GF	PA						
	ctors: (Constant), l							
Source: ]	processed data							
Source:	processed data	Tab	le 4. Co	efficie	nts <sup>a</sup>			
Source:		Tabl Unstandardized			nts <sup>a</sup> Standar Coeffic			
Source: j	processed data		Coeffic		Standar		t	Sig.
	(Constant)	Unstandardized	Coeffic	ients	Standar	ients	t 16.928	Sig. .000
		Unstandardized B	Coeffic	ients Error	Standar	ients	t 16.928 988	

Source: processed data

The R Square of 0.042 indicates that only about 4.2% of the variation in GPA can be explained by the intensity of social media use. This means that most of the variation in GPA is not explained by the intensity of social media use variable. Sig. F Change of 0.334 in the ANOVA indicates that the regression model is not statistically significant. In other words, the intensity of social media use does not have a significant influence on students' GPA. The coefficient of INTENSITY is -0.063, which means that for every one unit increase in the intensity of social media use, it is predicted that GPA will decrease by 0.063 points. However, the p-value of 0.334 indicates that this coefficient is not significant.

## 3.1. Research Hypothesis

Research Hypothesis Null Hypothesis (H<sub>0</sub>): There is no significant relationship between the intensity of social media use and academic achievement (GPA) of Open University (UT) Archives DIV Study Program students.

Alternative Hypothesis (H<sub>1</sub>): There is a significant relationship between the intensity of social media use and academic achievement (GPA) of Open University (UT) Archives DIV Study Program students.

Based on the results of the statistical analysis which shows that the relationship between the intensity of social media use and GPA is not significant (p-value = 0.334), the null hypothesis (H<sub>0</sub>) is not rejected, which means that there is no significant relationship between the two variables.



These results are in line with research (Kitsantas, 2016) that these negative effects may be caused by social media that can divert students' attention from educational purposes to other content. Another study (Tang, 2015) conducted with university students in Hong Kong revealed that although students used social media for educational purposes, they were willingly distracted by the entertainment and social functions delivered by social media. Thus suggesting that social media use can interfere with academic goals when used in an undirected manner. This negative effect is caused by multitasking or excessive engagement in entertainment and social functions that can distract students from academic activities and social media use can negatively impact academic performance when students are distracted by non-academic functions during the learning process.

The results of this survey also show that around 65% of student correspondents use social media, especially WhatsApp, as a medium to spend their time and also help in academic activities in discussing and finding references in academic learning materials so that there is a positive relationship between the frequency of using social media (WhatsApp) for educational purposes and the academic performance (GPA) of university students. This is consistent with the findings of Quansah et al. (2016) which state that the directed use of WhatsApp for education can support academic performance. This result is also different from the findings of Yeboah and Ewur (2014) who showed a negative effect of WhatsApp use on academic performance.

The results of this study, which show a negative relationship between intensity of social media use and GPA, are consistent with findings from studies that highlight the negative impact of social media in the context of multitasking or non-directed use on academic goals. Excessive use of social media, especially for entertainment, can distract students from their learning goals. In the context of Open University (UT), where students are required to learn independently, such distractions may have a greater impact compared to students in conventional institutions who have more frequent access to live teaching and interaction with lecturers.

However, although the main findings of this study indicate a negative relationship, it is also important to consider the role of social media as an effective tool in educational contexts for conducting research and sharing personal academic interests, and can be used to create study groups, and enhance the functionality of e-textbooks by connecting students with collective ideas for collaborative purposes. As O'Brien argues, students who form social media study groups and use them for collaborative purposes can improve their academic performance. This also reinforces Cox and McLeod's (2014) argument that social media facilitates communication among stakeholders in educational settings and supports learning through the internet. Therefore, teachers should encourage students to work together through social media on academic matters to improve their performance.

In the Open University (UT) context, where face-to-face interaction is limited, social media can be an effective bridge to overcome these limitations. UT students can use social media to form virtual learning communities that allow them to exchange information, share lecture notes and discuss academic topics more freely. This supports the role of social media as an additional



resource that can help students overcome the challenges of independent learning. Thus, purposeful and educationally-focused use of social media can have a positive impact on students' academic performance.

Finally, in the context of distance education at the Open University (UT), **the** results of this study highlight the importance of designing strategies that support the optimal use of social media for learning purposes. Educational authorities need to formulate policies that support the integration of social media as an effective learning tool, given its vital role in supporting academic achievement in environments where face-to-face interaction is very limited. Social media has the potential to expand students' access to learning materials, build support networks between students, and create a more interactive and inclusive learning environment, which will ultimately improve overall academic achievement.

## 4. Conclusions

This study examines the impact of social media on the academic achievement of Open University (UT) Archives D IV Study Program students through Pearson correlation analysis and linear regression. The results of the analysis show that there is a very weak negative correlation between the intensity of social media use and students' Grade Point Average (GPA), with a Pearson Correlation value of -0.206. The statistical significance (p-value = 0.334) shows that this relationship is not significant, indicating that the intensity of social media use does not substantially affect student GPA.

Further regression analysis showed that only 4.2% of the variation in GPA could be explained by the intensity of social media use, indicating that other factors may be more dominant in influencing academic performance. Despite the negative indications, around 75% of the respondents admitted to using social media, particularly WhatsApp, for academic purposes, indicating a potential positive when used in a purposeful manner.

The results of this study are in line with previous studies that indicate that social media can distract students from academic activities, but also serve as a tool to support collaboration and learning. Therefore, it is important to direct the use of social media strategically in the context of distance education at the Open University, in order to enhance academic interaction and support.

Overall, although negative impacts were identified, purposeful use of social media can contribute positively to academic performance. This research recommends the development of policies that support the integration of social media in the learning process, so that students can utilize these tools to improve their academic performance.

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