

Article

## The Impact of Social Media Use on Academic Achievement among University Students: Evidence from a Descriptive Study

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**Abstract:** This paper will discuss the effects of social media on academic performance of university students in terms of positive and negative effects. The research design was descriptive analytical research design and the data were collected with the help of the structured questionnaire which was given to a sample of 60 students which was selected with the help of simple random sampling. The results showed that social media has a two-fold effect on academic performance. On the one hand, it improves communication, promotes the interaction with peers and instructors, and encourages collaborative learning. On the downside, overuse causes distraction, lack of concentration and lack of motivation to study. The findings also revealed that there was a statistically significant association between social media use and academic achievement whereby more frequent use was related to poor academic achievement. Moreover, the results did not show statistically significant differences on how social media affects academic performance by gender. The research concludes that the impact of social media on academic performance is highly dependent on the use patterns. As such, social media should be used in a balanced and intentional manner so as to help maximize its usefulness and minimize its harm. The research suggests the creation of awareness among the students and the incorporation of social media into the education process in a systematic way.

**Keywords:** *Social media use, academic achievement, university students, positive effects, negative effects, student engagement, digital learning, online communication*

## **Introduction**

The rapid development of digital technologies has essentially altered the trends of communication, interaction and exchange of information within societies. Social media is one of such developments, and it has become one of the most effective tools that affect the current life, especially in the case of university students. These media allow users to generate, distribute and consume information in real time thus minimizing geographical and temporal boundaries (Kaplan and Haenlein, 2010).

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Social media has found its way into the daily lives of students and it has not only affected their social lives but also their school behaviours. One of the most active classes of users is the students of the university, who use these platforms as a means of communication, collaboration, and access to learning tools (Junco, 2012). Though the social media provides academic opportunities, it also presents threats to academic performance including distraction, lack of concentration, and mismanagement of time.

Theoretically, social media usage and academic performance can be described using social learning theory in which interaction and observation play a crucial role in behavioural development (Bandura, 1977). The uses and gratifications theory further implies that people are knowledgeable about the media platform that they will use to fulfil certain needs, including seeking information, socializing, and entertainment (Katz et al., 1973).

Empirical studies have taken conflicting positions on the effectiveness of social media on academic performance. There are studies that indicate that social media improves learning by collaborating and sharing information, and there are studies that indicate that social media is detrimental because it leads to excessive use and distraction (Kirschner and Karpinski, 2010; Junco, 2015).

Since the use of social media among higher education learners is on the rise, it is necessary to investigate how it influences academic success in particular education and cultural settings. Thus, this research paper seeks to unravel the good and bad aspects of social media on the performance of university students.

### **Problem**

Although the use of social media is widespread among university students, the influence that it has on academic performance is an issue of continuous debate. Although there are studies that point out its importance in improvement of communication, collaboration, and access to education resources, others point out the negative impacts, including distraction, lack of concentration, and time mismanagement. The growing use of social media has altered the study habits and learning environment of the students, and concerns have been raised regarding its effect on the performance of the students. The use of these

platforms is especially prone to both advantages and disadvantages because university students use them intensively.

Even though some studies have been conducted to determine the correlation between social media and academic performance, the results are inconclusive, and more empirical studies in the context of specific education and culture are needed.

In this regard, this research aims at providing the answer to the following key question:

How does academic achievement of university students depend on the use of social media?

### **Literature Review**

An accumulating amount of research has examined the effects of social media on academic performance with mixed positive and negative results.

On the brighter side, a number of studies have shown that social media can improve academic interactions and cooperative learning among students. Junco (2012) discovered that social networking sites can be used to facilitate interaction and engagement among students, and when utilized as a means of education, they can improve academic performance. On the same note, Tess (2013) emphasized that social media enabled interaction between students and instructors, which encouraged active learning sessions.

In addition, a study by Al-Rahmi and Othman (2013) has shown that social media has a positive impact on academic performance as it improves knowledge sharing and learning among students in a collaborative way. These results are consistent with the social learning theory that stresses the role of interaction in the learning process.

Nonetheless, many studies have shown that overuse of social media has negative consequences on academic performance. In a study by Kirschner and Karpinski (2010), students who use social networking sites often have lower grade point averages (GPAs) and spend less time studying. This is an indication that overindulgence in social media could result in low academic results.

On the same note, Junco (2015) proved that bifurcating with social media during the learning process has adverse effects on the academic performance of students because it lowers their concentration and cognitive processing ability. Moreover, Rosen et al. (2013) have discovered that students that check on social media regularly during learning periods record poor academic performance because of divided attention.

Besides, recent reports have highlighted psychological and behavioural effects of excessive use of social media. Indicatively, Al-Rahmi et al. (2018) found out that overuse of social media is linked to the low motivation to study and high procrastination in students.

All in all, the literature indicates that social media affects academic achievement in a two-fold manner. Although it can have a positive impact on learning by means of communication and collaboration, its unmonitored and overuse can lead to adverse outcomes on the students in terms of academic performance. Although the number of studies is increasing, more research is still necessary that focuses on these effects in particular settings, especially among college students.

### **Objectives**

The study aims to achieve the following objectives:

1. To identify the positive effects of social media use on academic achievement among university students
2. To examine the negative effects of social media use on academic achievement
3. To analyse the relationship between social media use and academic achievement
4. To investigate whether there are statistically significant differences in this relationship based on gender

### **Questions**

The study is guided by the following research questions:

1. What are the positive effects of social media use on academic achievement among university students?
2. What are the negative effects of social media use on academic achievement?
3. Is there a statistically significant relationship between social media use and academic achievement?
4. Are there statistically significant differences in the impact of social media use on academic achievement attributable to gender?

### **Hypotheses**

**H1:** There is a statistically significant relationship between social media use and academic achievement among university students.

**H2:** There are no statistically significant differences in the impact of social media use on academic achievement attributable to gender.

## Methodology

### Research Design

The research design used in this study was a descriptive analytical research design which is the right one to be used in exploring the relationship between variables and describing the patterns within a given population. The design will allow the researcher to investigate the positive and negative impacts of the use of social media on academic performance among university students.

### Population and Sample

The target population was made up of the students of the university who are studying throughout the academic year 2023/2024.

The participants were selected through a simple random sampling method, and all the students were given equal opportunities to be included in the study. The last sample consisted of 60 students.

Both male and female students of various age groups, marital statuses, and family sizes were taken as the sample. This diversity assisted in offering a wider perspective of the views of the students on how social media has affected their academic performance.

**Table 1**

*Demographic Characteristics of the Study Sample*

Variable	Category	Frequency	Percentage
Gender	Male	29	48.3%
	Female	31	51.7%
<b>Total</b>		<b>60</b>	<b>100%</b>
Age	20–30 years	10	16.7%
	31–40 years	29	48.3%
	41–50 years	10	16.7%
	51 years and above	11	18.3%
<b>Total</b>		<b>60</b>	<b>100%</b>
Marital Status	Single	16	26.7%
	Married	28	46.7%
	Divorced	10	16.7%
	Widowed	6	10.0%
<b>Total</b>		<b>60</b>	<b>100%</b>

According to table (1), female subjects made up 51.7 percent of the sample and male subjects made up 48.3 percent. The highest proportion was 3140 years (48.3), and the lowest proportions were 2030 years (16.7), and 4150 years (16.7). Marital status wise, the largest proportion of respondents was married (46.7%), with the smallest proportion being widowed (10.0%).

**Research Instrument**

A structured questionnaire that was created by the researcher through the relevant literature was used to collect data.

The questionnaire was divided into two parts:

Section One: Demographic (gender, age, marital status, family size) variables.

Section Two: Study variables, comprising of 10 items, and two dimensions:

Benefits of social media (5 items).

Undesirable outcomes of social media (5 items)

The answers were assessed on a five-point Likert scale, i.e.

1 = Strongly disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly agree

**Validity of the Instrument**

The content validity was achieved by subjecting the questionnaire to a group of specialists in the area of social sciences. Their comments were utilized in improving the clarity, wording and relevance of the items. Their recommendations were used to come up with the final version of the instrument.

**Instrument Reliability.**

To measure reliability, the alpha coefficient of Cronbach was used to determine internal consistency. The general reliability of the instrument was determined to be 0.82 which is an acceptable degree of reliability in social science research.

**Table 2**

Reliability of the Study Instrument

<b>Dimension</b>	<b>Cronbach's Alpha</b>
Overall instrument	0.82

Table 2 shows that the overall Cronbach's alpha coefficient of the instrument was 0.82, indicating an acceptable level of internal consistency for the purposes of this study.

**Data Collection Procedures**

The selected students were given the questionnaire at the time of the study. The participants were made aware of the objective of the study and guaranteed that their answers would be kept confidential.

Students were allowed to respond to all questions voluntarily and were advised to respond in a sincere manner.

### Data Analysis

The data obtained were analysed with the help of the proper statistical methods:

The first and second research questions were answered using descriptive statistics (means and standard deviations) in terms of the positive and negative impact of social media.

To test H1, Pearson correlation coefficient was employed to test the relationship between social media and academic achievement.

To test H2, the independent samples t-test was performed to establish whether the differences between the effects of social media on academic achievement due to gender were statistically significant.

The level of statistical significance was set at  $\alpha \leq 0.05$ .

### Ethical Considerations

The research was conducted in accordance with the ethical research standards. Participation was voluntary, and informed consent was taken among all the participants. Anonymity and confidentiality was provided and the data were utilized only in academic purposes.

## Results

### Results Related to Research Question 1: What are the positive effects of social media use on academic achievement among university students?

To answer this question, means and standard deviations were calculated for the items measuring the positive effects of social media, as shown in Table (3).

**Table 3**

*Positive Effects of Social Media on Academic Achievement*

Rank	Item	Mean	Std. Dev.	Level
1	Helps students learn dialogue and discussion skills	4.20	0.83	High
2	Enables communication with professors after official hours	4.19	0.91	High
3	Helps communication with peers and reviewing lessons	3.63	1.41	Moderate
4	Increases students' cultural awareness	3.47	1.32	Moderate
5	Enhances performance and language skills	3.34	1.11	Moderate
<b>Overall Mean</b>		<b>3.68</b>	0.94	High

As Table 3 shows, the total degree of positive impacts of social media was high (M = 3.68). The most significant positive outcomes were connected with the enhancement of the communication and discussion skills.

**Results Related to Research Question 2:** What are the negative effects of social media use on academic achievement?

Means and standard deviations were calculated for the negative effects, as shown in Table (3).

**Table 4**

*Negative Effects of Social Media on Academic Achievement*

Rank	Item	Mean	Std. Dev.	Level
1	Staying up late reduces concentration	4.32	0.86	High
2	Neglect of academic tasks due to social media	4.23	1.16	High
3	Reduced motivation for studying	3.43	1.25	Moderate
4	Distraction from academic information	3.40	1.34	Moderate
5	Difficulty concentrating due to overuse	3.12	1.14	Moderate
<b>Overall Mean</b>		<b>3.70</b>	0.97	High

Table 4 demonstrates that the adverse impact of social media was high in general (M = 3.70), which implies that excessive use has a tremendous impact on the academic performance of students.

**Hypothesis testing: H1:** There is a statistically significant relationship between social media use and academic achievement

To test this hypothesis, Pearson’s correlation coefficient was calculated, as shown in Table 4.

**Table 45**

*Pearson Correlation between Social Media Use and Academic Achievement*

Variable	Social Media Use	Academic Achievement
Social Media Use	1	-0.65**
Academic Achievement	-0.65**	1

Table 5 shows that there is a strong negative relationship between academic achievement and the use of social media (r = -0.65, p < 0.01). This implies that the more the social media is used, the worse the academic performance. Therefore, H1 is supported.

**Hypothesis testing H2:** There are no statistically significant differences in the impact of social media on academic achievement attributable to gender

An independent samples t-test was conducted, as shown in Table (5).

**Table 6**

*Independent Samples t-test by Gender*

<b>Gender</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>t-value</b>	<b>Sig.</b>
Male	3.88	0.82	1.45	0.098
Female	3.95	0.76		

Table 6 indicates that the difference between male and female students in terms of the effect of social media on academic performance is not statistically significant ( $p = 0.098 > 0.05$ ). Therefore, H2 is accepted.

### **Discussions**

The current research was to analyse the impact of using social media on academic success of students in universities by determining its positive and negative aspects and also by testing gender differences. The results showed a twofold effect of social media on academic performance. On the good news, the findings showed that there was a high degree of consensus on the role of social media in improving communication, discussion, and interaction with peers and instructors. This implies that social media can be a useful learning tool in the right hands.

This could be explained with the help of social learning theory (Bandura, 1977) that focuses on interaction and observation as learning process. The use of social media platforms will offer spaces where discussion, sharing of knowledge and collaborative learning can be done, thus contributing to academic activity. These findings are similar to the past research, including Junco (2012) and Tess (2013) which have determined that social media improves student engagement and participation in the learning process.

Nevertheless, the results also showed that the ill effects of social media are also enormous, especially when it comes to less concentration, study distraction, and lower motives to study. The most notable adverse effect was associated with staying late on social media resulting in decreased concentrations during academic engagements.

These findings are consistent with the previous studies, which reveal that active social media use may have a detrimental effect on academic performance (Kirschner and Karpinski, 2010; Junco, 2015). Cognitively, this could be caused by use of social media frequently in time spent studying which would result to divided attention and incapacity to process information so that academic achievement is hindered.

Furthermore, the correlation outcomes affirmed statistically significant correlation between the social media use and academic achievement meaning that the more the social media is used the lower is the academic achievement. This observation supports the notion that social media carries both positive and

negative effects on education, as the unchecked and overuse of the application can have adverse effects on academic performance.

In terms of gender difference, the both genders (Male and Female) did not have statistically significant differences in terms of the effects of social media on academic achievement. This implies that the use of social media is a common phenomenon among the students of universities which has impacted both sexes alike. This observation aligns with other researchers who have found that there are few gender differences in patterns of social media use and their effects on learning.

All in all, the results of this paper show that social media is a two-sided instrument. Although it provides the possibilities of communication, cooperation, and studying, its abuse may have adverse effects on the academic achievements of students. Thus, the effects of social media are mostly influenced by its usage but not by the platforms.

### **Conclusion**

This paper has explored the influence of social media on the performance of university students in terms of its beneficial and adverse aspects. The results showed that social media has a two-fold role in the academic lives of students.

On the one hand, social media can have a positive impact, improving communication, interaction with peers and instructors, and collaborative learning. Conversely, overuse of social media has a negative outcome since it lowers concentration, distracts, and demotivates students to study.

The research also established that there is a statistically significant relationship between social media use and academic achievement such that increased levels of use have been found to be accompanied by lower levels of academic performance. Additionally, the results did not indicate any statistically significant variation according to the gender factor, which implies that the effects of social media on both male and female students are similar.

Finally, social media cannot be considered as either entirely good or evil; instead, the effects of its use are largely determined by the patterns and the intensity of its use. As such, it is important to encourage students to use social media in a balanced and purposeful way to ensure that it yields the most benefits and the least harm to academic performance.

### **Recommendations**

On the basis of the results of this study the following recommendations are made:

Educating college students on the adverse consequences of overuse of social media on education.

Promoting the use of effective time management skills to help students balance between their social media and schoolwork.

Implementing the use of social media in learning in a systematic and regulated way to improve learning.

Arranging training programmes and workshops to mentor students on how to use social media in the best and efficient way.

Promoting teachers to use social media as interactive learning tools to facilitate student learning.

Carrying out additional studies on bigger and more varied samples to achieve a more accurate understanding of the long-term implications of using social media on academic performance.

## **Implications**

### ***Practical Implications***

The results of this research indicate the need to design learning methods that integrate social media as a learning platform and reduce its adverse effects. Schools and colleges need to implement strategies which can encourage fair usage of online resources and help students acquire self-regulation.

### ***Theoretical Implications***

This research paper adds to the literature by providing evidence to social learning theory in understanding the effects of digital interaction environments on learning behaviour. It also takes the existing studies a step further by giving empirical information of the two-sidedness of the influence of social media on academic success.

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