

# Effect of Social Media on Perceived Students Academic Performance of Higher Institutions: A case of Public Universities in Accra, Ghana

Frank Osei Danquah<sup>1\*</sup> Bright Korankye Asiamah<sup>2</sup> Mark Owusu Fordjour<sup>3</sup>

1. College of Economics and Management, Sichuan Agricultural University, Chengdu 611130, China
2. School of Economics and Management, University of Electronics Science and Technology, Chengdu, China
3. Dunkwa Secondary Technical School, Accra-Ghana

\* E-mail of the corresponding author: [frankdanquahosei@gmail.com](mailto:frankdanquahosei@gmail.com)

## Abstract

It is an undisputable fact that the advancement of technology has taken over all activities in the world. Being it business, education or church activities. The popularity of social media is relatively recent and the effect of Online Social Networking (OSN) on students' performance has not received much scholarly attention. The aim of this study is to examine the role of social media on perceived students' academic performance of higher educational institutions focusing on public universities in Accra, Ghana. The study adopted a descriptive survey. Purposive sampling technique was used to select three public universities within greater Accra Region. Primary data was collected using structured questionnaires which were administered personally. Stratified random sampling technique was used to select the sample size of 298 students from the three public universities. Data was presented by the use of frequency tables then analyzed using descriptive statistical techniques such as frequencies and percentages. A multiple regression analysis was also conducted to investigate the effect of social media platforms on students' academic performance. The study ascertained that there is positive correlation between social media and academic performance and social media can be used to predict academic performance of tertiary students. The study concludes that most of the students use social media platforms to entertain themselves during lecture period when lectures is boring. It's recommended that, tertiary institutions should make it a point connecting academic activities with social media platforms in order to get the attention of students to improve upon their academic performance.

**Keywords:** Social Media, Perceived Students, Academic Performance and Public Universities in Ghana

## 1. Introduction

Social networks have become an integral part of student social life (Adams, 2015). These networks have become important as they serve as platforms for users to interact and relate with their peers. Social media has however become a platform that is easily accessible to anyone with internet access, opening doors for students to build strong communication among themselves and facilitate conversations with the lecturers (Adams, 2015).

A study conducted by Negussie and Ketema (2014) in Jima University, Ethiopia, indicated that most students use their personal laptops and smart phones to access social network sites such as Facebook. The popularity of social media is relatively recent and the effect of Online Social Networking (OSN) on students' performance has not received much scholarly attention.

Mingle (2016) argues that understanding social media activities and what students do on these sites will help academics to better engage them. Bill (2010) also maintains that participation and engagement in social media will provide the platform from which to build relationships with students and stakeholders of the universities.

There have been a lot of debates on various platforms and media as to the impact that social media has on perceived student academic performance, and its role on education. Some of these studies found a drop in students' grades and academic performance, and lack of time for studies as consequences of social media network participation (Adams, 2015).

On the other hand, Pasek et al. (2006) "stated that a site-specific culture can both positively and negatively affect the building of social capital and found that Facebook usage is not positively associated with lower grades of students and rather Facebook users scored higher grades". Kolek and Saunders (2008), did not find any correlation between GPAs of student users and social network participation such as Facebook. Rather

social network sites promote interactions among students and teachers (Ahmed & Qazi, 2011).

From the above studies it is evident that there are conflicting findings. This may be attributed to the cultural, demographical and other contextual factors that has resulted in the varied findings. Moreover, Horton, Alloway, and Dawson (2012) reveals that social media affects students time of study, the wrong usage of grammar and spelling. Students of tertiary institutions in most countries are always very busy with their handset and laptops.

Give most students access to the Internet and they will spend considerable time chatting, checking their emails, their Facebook profiles, SnapChat, updating their Twitter accounts and their LinkedIn accounts, and it does not happen only once a day rather a norm. It is speculated that an average Ghanaian youth spend about 6 -7 hours on the internet daily, some do all night browsing (Kadali, 2011).

Disturbing question to most scholars is when do they have the time to read or study their books? Do most of these students really use the social media sites for academic purposes? It is against this background that this study is very significant as most students are found of using the social media sites. Hence, the study examines the impact of social media sites on student's academic performance in public universities in Accra-Ghana.

## **2. Review of Related Literature**

### *2.1.1 Uses and Gratification Theory*

Uses and gratifications theory basically stresses how and why the audience use the media (Haridakis & Hanson, 2009). Also, expatiating on the theory, McQuail (2010) states that "the central question posed is: why do people use media, and what do they use them for?" He further posits that: Functionalist sociology (Wright, 1974) viewed the media as serving the various needs of the society. For instance, for cohesion, cultural continuity, social control and a large circulation of public information of all kinds. This, in turn, presupposes that individuals also use media for related purposes such as personal guidance, relaxation, adjustment, information and identity formation. The suitability of it in our discourse here springs from the fact that the students in the university communities' usage of the social media channels depends largely on the specific satisfaction they derive from them (the social media channels). In view of the scholars quoted above paint a lucid picture that would actually buttress the meaning of the uses and gratifications theory and the rationale for its application in this study.

### *2.1.2 Media Systems Dependency (MSD) Theory*

This study can be explained, using the media systems dependency (MSD) theory. The media systems dependency theory was first proposed by Sandra Ball-Rokeach and Melvin Defleur in 1976, and consists of a complex system in which the media, individuals, their personal environment, and the social environment have dependency relationships with each other. Each component depends on the others components in a system by drawing on resource in order to satisfy goals. Particular attention is given to the resources of media systems in modern society and the consideration conditions which will increase or decrease individuals reliance on media system. In another way, media systems dependency theory is a relationship in which the capacity of individuals to attain their goals is contingent upon the information resources of the media systems.

According to Baran and Davies (2009), media systems dependency theory assumes that the more a person depends on having his or her needs met by media use, the more important will be the role that the media plays in the person's life, and therefore, the more influence the media will have on the person. Recently most people all over the world have come to find the media as an effective communication tool or a source of information regarding happenings in the world. Little-John (2002) also explained that people will become more dependent on the media that meet a number of their needs than on the media that touch only a few needs. From this background we can conclude that the consistence reliance of tertiary students on the media for their expressions of thought and sharing of ideas, the more influential they become by the media.

### *2.2 Why is Social Media Important?*

Using social media by University students is certainly a fascinating portion of research for educationists and social scientists. Hamid, Chang and Kurnia (2009) maintain that in the available literature there are beneficial designs and styles of employing it at school level. It describes the introduction of contents and focuses on how to share, interact, and collaborate and socialize by its use. There appear different top reasons to justify using social media in greater education. It usage was confirmed by preserve setup it's familiar with enhance study encounters of students by provision of e-support services on their behalf (Dabner, 2011). Amongst others, Facebook appears being most likely probably the most favorite suggested as a means of communication for reaching students (Mack, Behler, Roberts and Rimland, 2007).

However, Social media's potential power to facilitate higher-level learning outcomes via collaborative learning

appears evident and it is supported by studies in literature (Brown, 2012; Novak, Razzouk, & Johnson, 2012). Even UNESCO, in its policy document, supported the potential of social media in this regard (Kommers, 2011) and recommended classroom experimentation with it to highlight its strengths and weaknesses. The perspective of the potential effective use of collaborative learning via social media in institutions of higher learning in the present time is often referred to as Web 2.0 (O'Reilly, 2007). This provides more interaction, collaborative learning, and user modifications (Kaplan & Haenlein, 2010) compared to Web 1.0, which is characterized as a more static resource that allows less interaction (Naik & Shivalingaiah, 2008).

Within the portion of collaborative learning, the internet sites handled the large problem elevated by teachers within the recent period. For instance, insufficiencies in humanitarian aspect and recognized to it teaching lacks spirit. However, Social media sites such as YouTube have assisted to solve a few individuals' problems, with the aid of interactive affiliate by getting a person, making the participation within the human consider the academic process something important. That introduced with an increase to attract people toward collaborative learning and many researchers within the aspects of social sciences undertaking studies to look at this phenomenon and to clarify the actual reason behind the attraction educated about internet sites for example (Ractham & Firpo, 2011; Jiang & Tang, 2010).

### *2.3 Effect of Social Media Use on Academic Performance of Students*

Questions arise about the impact of social media on academic performance and the possibility of using it as an effective pedagogical tool to improve academic performance of students. The fact is that, there are benefits and risks associated with using any social network. There have been reports regarding its effect on students' academic performance. Some scholars investigated the end result of social networking usability among College students' and with their academic performance. They found a poor effect and influence when the media is overuse in such a way that do not academically improve learning or its process (Wang, Chen and Liang, 2011; Stollak, Vandenberg, Burklund and Weiss, 2011; Karpinski & Duberstein, 2009; Canales, Wilbanks and Yeoman, 2009). Junco (2011) maintains that social media across fields of study has a greater impact on academic performance on its users. According to studies (Jackson, 2011; Mazman & Usluel, 2010; Wodzicki et al., 2012), students are enabled by social media to categorize themselves with similar peers and to enhance and connect with them. Moreover, it also decreases the diversity in the classroom via a neutral zone wherein students can interact with their peers (Junco et al., 2011; Pike, Kuh, & McCormick, 2011; Al-rahmi et al., 2014).

In the study conducted by Englander et al., (2010), he observed that students spend more time using social media for other purposes rather than for educational use, thus affecting their academic performance. Nalwa and Anand, (2003) are in concordant with Englander et al (2010) as they also mention that students like using the internet for their own purposes and this affects their academic performance. Kirschner and Karpinski (2010) study on the relationship between Facebook and academic performance. The findings reveal that there is a significant negative relationship between Facebook use and academic performance. Respondents reported spending fewer hours in a week studying on average compared to non-users. Most respondents claimed to use Facebook accounts at least once day. Their study is in line with findings of (Canales et al., 2009; Junco, 2012). The American Educational Research Association conducted a research and declared at its annual conference in San Diego California (2009), that social media users study less and generate lower grade (Abaleta et al, 2014).

San Miguel (2009), focused on the relationship between time spent on Facebook and the academic performance of students. The overall findings indicated "more time on Facebook equals slightly lower grades". In his study, the average Facebook user had a GPA of 3.0 to 3.5, while the non- Facebook user had a GPA of 3.5 - 4.0. Also, the average Facebook user study for 1 – 5 hours per week, while the non-Facebook user would study 11– 15 hours per week. A similar study conducted by Karpinski and Duberstein (2009), of Ohio Dominican university on college students who use social network have significantly lower grade point averages (GPAs) than those who do not. They also mentioned that among various unique distractions of every single generation, Facebook remains a major distraction of current generation.

However, according to Meyer (2010), using social media in completing assignments led to greater degrees of learning as asserted by Bloom's taxonomy, particularly in online discussions. Gray, Chang and Kennedy (2010) pointed out that lecturers have reported that using online technologies can encourage online discussion among students outside the classes, beyond the traditional class setting. In comparison to normal websites, social media has specific applications that provide various ways to collaborate. They comprise different tools elaborated by Kaplan and Haenlein (2010), which include collaborative projects, blogs, content communities (YouTube), and social networking sites (Facebook). Social networking sites have strong academic cultures that are built within the online community (June, 2011).

### 2.3 Theoretical Framework and Hypothesis

#### 2.4 Conceptual Framework

Based on the above theories and definitions review, the following framework has been formulated to depict the relationship between the dependent and independent variables.

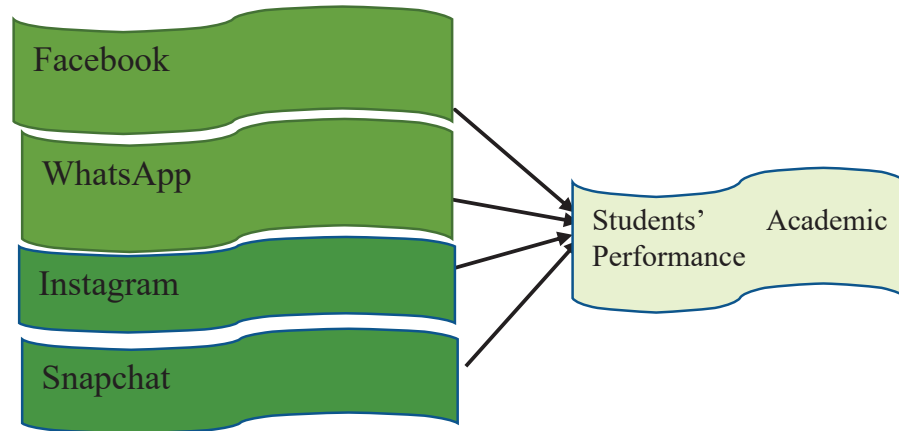


Figure 3-1 Theoretical Model  
 Source: Researcher's Construct, 2018

## 3. Study Methodology

### 3.1 Purpose of the Study

The purpose of the study is to find whether social media platforms or sites have any significant influence on the academic performance of tertiary students in Ghana.

### 3.2 Research Design and Sampling Technique

The research design adopted for the study was a descriptive survey. This design is considered appropriate because it enables the researchers to generate data through the standardized collection procedures based on highly structured research instrument(s) and well defined study concepts and related variables. Conclusively, descriptive research was adopted because it aim is to achieve the following goals: provide an accurate profile of a group or situation; give description to a process, mechanism or relationship; provide a verbal or numerical picture of the situation; source for information to stimulate new explanations; contextual presentation of basic background information; and categorization of the problems and documentation of information that contradicts prior beliefs about a subject. A comprehensive questionnaire designed to cover the objectives of the study was used to collect the data.

### 3.3 Data Analysis Method

Data were collected and processed from various sources using the chosen data collection instruments. The questionnaires, which were answered by the respondents were tabulated and data analyzed by using descriptive, inferential and quantitative analytical techniques with estimations from the Statistical Package for Social Sciences (SPSS). Statistical tools such as frequency distribution tables were employed in analyzing the questionnaire. This study employed the ordinary least squares multiple regression econometric model in estimating the study. The multiple regression model is specified as follows:

$$AP = \alpha + \beta_1 FB + \beta_2 WA + \beta_3 I + \beta_4 SC + \varepsilon \quad \text{for } \beta_i > 0$$

Where AP indicates Academic Performance; FB represents FaceBook as one of the most popular social media networks in the world, WA denotes the WhatsApp as part of the social media networks, I is Instagram also as one of the influencing social media network popular among the youths and SC represents Snap Chat as part of the social media networks.  $\beta_1, \beta_2, \beta_3$  and  $\beta_4$  represents the coefficients of the independent variables, and  $\alpha$  is the constant term whereas  $\varepsilon$  represents the error term of the model. As a justification for the model, Maddala (1986) identified that the ordinary least square is more robust against specification error than many of the simultaneous equation methods of estimation and also states that productions from equations by ordinary least square are often

favorably preferred compared with those obtained from the use of equations estimated by the simultaneous equation method.

#### 4. Empirical Results and Discussions

##### 4.1 Socio-Economic Demographic Characteristics of Respondent's

The socio-economic demographic characteristics of the respondents are summarized in Table 1.

Table 1: Socio-economic Demographic Characteristics of Respondents

		N	%
Gender	Female	63	42
	Male	87	58
	Total	150	100
Age group	18 – 25years	142	94.3
	26 – 35 years	8	5.3
	36 – 45 years	-	-
	45 and above	-	-
	Total	150	100.0
University of Study	University of Ghana	53	35.3
	University of Professional Studies	80	53.4
	GIMPA	17	11.3
	Total	150	100.0
Level	100	25	16.7
	200	52	34.7
	300	44	29.4
	400	29	19.3
	Total	150	100.0

Source: Researcher's Field Data, 2017

Among the 150 questionnaires filled, the statistics shown in table 4.2 below indicates that 87(58%) of the students were males as against 63(42%) of females. The table 4.1 above also indicates that 142 of the respondents representing 94.7% constitute majority of the sample size and fall between 18 – 25 years and 8 of the students representing 5.3% are aged between 26 – 55 years. None of the students who participated in the study were between the ages of 36 - 45 years and above 46 years. The study explored the various 3 public universities in Greater Accra Region. Out of the 150 respondents, the above same table shows that 80 respondents (53.4%) were students of University of Professional Studies, Accra, University of Ghana students followed with 53(35.3%) and 17 respondents (11.3%) represented students of Ghana Institute of Management and Public Administration. The last demographic variable portrayed that 52 respondents (34.7%) were level 200 students, 44 respondents (29.3%) represents level 300 students, while 29 respondents (19.3%) were level 400 students. Finally 25 respondents also expressed that they are level 100 students.

##### 4.2 Multiple Regression Results and Analysis

The results presented in Table 2 exhibit the relationship between the elements of internal control and the quality of financial reporting.

Table 2: Multiple Regression Results

Model		Unstandardized Coefficients		Standardized Coefficients	T-Ratio	P-Value
		B	Std. Error	Beta		
1	(Constant)	-.328	.157		-2.082	0.039***
	FaceBook	.331	.151	.184	2.183	0.031***
	WhatsApp	.625	.218	.301	2.866	0.005***
	Instagram	.667	.351	.246	1.898	0.060***
	Snap Chat	.375	.363	.148	1.032	0.304
R-Square		0.622				

Source: Researcher's survey, 2018

ote: Dependent Variable: AP \*\*\* at 5% significant level.

From the results of the multiple linear regression displayed in Table 4.2, the coefficient of determination  $R^2$  (0.622) indicates that 62.2% of the variations in the dependent variable (Academic performance) is explained jointly by the independent variables (FaceBook; WhatsApp; Instagram and Snap Chat). The study found that FaceBook has a significant and positive influence on the academic performance of the students. This result was found at 1% level of significant. With its coefficient of 0.331, a 1% change in the usage of FaceBook for academic purposes by students will result in 33.1% enhancement in the academic performance of the students. This implies that FaceBook is significant determinant of academic performance.

Also, it was discovered that WhatsApp related positively to the academic performance and it was significant at 1% level of significance. Thus, a 1% change in the usage of WhatsApp by students brings about 62.5% upsurge in the academic performance of the students. Therefore, it is apparent to conclude that the coefficient of WhatsApp is relevant in predicting the academic performance of tertiary students. The study further observed that a unit increase in the use of Instagram will predict academic performance by 66.7%, holding all the other factors constant. This result indicates that there is sufficient evident to suggest that the coefficient of Instagram is significant in predicting the academic performance of the tertiary students. Concluding that the use of Instagram can have both positive and negative impacts on academic performance based on its usage.

The study finally portrayed that Snap Chat related positively to the academic performance and but is however not significant. Thus, a 1% increase in the usage of Snap Chat by students brings about 37.5% upsurge in the academic performance of the students. Therefore, it is apparent to conclude that the coefficient of Snap Chat is relevant in predicting the academic performance of tertiary students.

#### 4.3 Analysis of Variance (ANOVA)

This analysis was done to determine the fitness of the regression model using the F-Statistic, and the results for the analysis of variance are presented in Table 3.

**Table 3: Results for the Analysis of Variance**

Model		Sum of Squares	Degree of Freedom	Mean Square	F-Statistic	P-Value
1	Regression	50.388	4	12.597	59.591	.000 <sup>b</sup>
	Residual	30.652	145	.211		
	Total	81.040	149			
a. Dependent Variable: AP						
b. Predictors: (Constant), FB, WA, I, SC						

Hypothesis of testing the model fitness

$H_0$ : The model does not fit well the dataset.

$H_1$ : The model fit well the dataset.

Considering the p-value (0.000) of the F-statistic (59.597), the multiple regression was found to be significant at 5%. This implies that there is enough evidence to reject the null hypothesis that model is not well fit for the dataset; hence suggesting that the model best fit the dataset used in this study.

#### 5. Conclusion and Recommendation

The study investigated the effect of social media on perceived students' academic performance among public tertiary students in Ghana. Based on the data obtained, and the findings of the study, the researchers established that social media plays a vigorous part and further has positive impact on academic performance of tertiary students in Ghana. The study revealed that social media platform can be used to predict academic performance of students. This study has its finding in line with a current study conducted by Owusu-Acheaw and Larson (2015) on the topic "Use of Social Media and its Impact on Academic Performance of tertiary Institution Students". The study was conducted in Ghana focusing on Koforidua Polytechnic. It also emerged from the study that the use of social media platforms had affected academic performance of the respondents negatively and there was direct relationship between the use of social media sites and academic performance.

The study concludes that, there is a strong positive correlation between social media platforms and academic performance of students. The study further concludes that; social media platforms has influence on academic performance of students. Thus, social media platforms can be used to predict the academic performance of students. Based on the findings of the study, the researchers recommend that in order to improve the academic performance of the students. It is undisputable fact that controlling the use of social media among students is difficult, hence public universities should develop a social media that could incorporate features that can assist research, teacher and student discussion and assignment pages. This media when loaded with much task will draw the attention of the students from the unimportant ones.

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