

Social Media Use among Students of Federal Polytechnic Ilaro, Ogun State, Nigeria: Implication on Academic Performance

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Abstract: This study investigated the impact of social media use on the academic performance of students of the Federal Polytechnic, Ilaro, Ogun State. Survey approach with the use of questionnaire was employed in gathering data for the study. Two hypotheses were formulated and data were collected using a questionnaire tagged Social Media Use and Students' Academic Performance Scale (SMUSAPS) The population comprises all students of the Federal Polytechnic, Ilaro but the sampling was confined to only the HND students. 70 HND students were randomly selected from each of the five schools of the Institutions – Applied Science, Communication and Information Technology, Engineering, Environmental Studies and Management Studies to make a total of 350 students selected as sample for the study. Data collected were analyzed using frequency counts and percentage; and the hypotheses were tested using Chi-square Likelihood Ratio Test at 0.05 level of significance. The results revealed that participation in social media impairs dedication of students to academic activities and that it has negative effect on students' academic performance. The study recommended that since there are perceived opportunities and advantages in the use of social media networks, Lecturers, parents, guardians and sponsors should always make efforts to educate students on the adverse consequence of excessive use of social media to ensure that students' addiction to social media especially for social activities alone is reduced and facilitate learning outcomes among the students.

Keywords: *Academic Performance, ICT, Learning, Polytechnic Students and Social Media*

I. INTRODUCTION

Modern invention in communication technology has broadened the scope of communication through Information and Communication Technologies. This advancement in communication technology has also affected internet use and has engendered a tremendous access and participation in social networking and interaction on internet sites known as social media. The online world has changed dramatically as a result of the inventions of social media, through which young men and women exchange ideas, feelings, personal information, pictures, videos e.t.c. at astonishing rate. The trend in social media technology has become an important means of online discourse where people create content, share it, bookmark it, etc. As a result of its ease of use, speed and reach, social media is fast gaining attention in modern discourse and setting agenda in topics that range from culture, environment, education, politics, technology, and entertainment [1]. Communicating through the internet and social networking websites is quite different from communicating in person-to- person situation. When users communicate through these websites, they use things like instant message (IM) and chatting [2]. They are modern interactive communication channels through which people connect to one another, share ideas, experiences, pictures, messages and information of common interest. What distinguishes the social media from the conventional means of communication is their interactive nature which allows the audience to participate in it from any part of the world they reside [3].

Social networking websites provide tools by which people can communicate, share information, and create new relationships. With the popularity of social networking websites on the rise, our social interaction is affected in multiple ways [2]. As we adapt to our increasingly technological world, the way web users interact and talk to each other has changed and continues to change. This interactive nature of the social media confers an unprecedented popularity on them, as they have the capabilities of educating, informing, entertaining and inflaming the audience. Above all, they possess a "contagious and outreaching influence" which the conventional media lack. This potential is most likely what [3] refers to as "unstoppable power of the social media". The foregoing points to the fact that social media have become an integral part of the young people and students' social life and this serve as platforms for users to interact and relate with their peers. The emergence of social media as a result of advancement in technology and expansion in internet software has raised concerns among academics especially on its impacts on academic life of students and learning outcomes [4]. Students at all levels of learning now have divided attention to studies, as a result of available opportunities to be harnessed

from social media. The use of social networking among students has become more and more popular. Students use it as a way to make connection not only on campus, but with friends outside school. It helps many people feel as though they belong to a community. Due to this increased popularity and use, researchers are questioning the phenomena impact of the social media on the academic life of students and the extent to which the time spent by students on the social media sites affect learning outcomes in schools [9] in [2]. Internet sites focus heavily on building online metropolitan areas certain to align with common interests or activities. Within the portion of collaborative learning, the internet sites handled the large problems and have assisted to solve a few individuals' problems, with the aid of interactive affiliate and encourage investigative-based and collaborative activities among students in higher education [5]. This open access for active participation and can therefore create opportunities for effective learning. Linked with this principle of collaborative development among learners, social media enable learners and teachers to share and publish information as a result of the learning activity (e.g. course materials such as course syllabus, course notes, assignments, test cases, etc) and invite feedback from peers. By publishing and presenting their work to a wide audience through blogs, wikis, or podcasts, learners benefit from the opportunity to appropriate new ideas, and transform their own understanding through reflection [6]. At higher level of education, more complex academic tasks are handled and the new generations of students are perceived to understand that social media and social technologies are influential to learning.

However, several researches have been carried out on the challenges that are connected with using internet and social media in higher education. [7] noted that internet addiction is significantly and negatively related to students' academic performance, as well as emotional attributes. [8] corroborates [7] assertion that the negative influence of internet is only on excessive users and not on all users. [9] reported that social media sites have negative effect on students' academic performance. [10] as cited in [2] found that facebook users often time experience poor academic performance. In the same way, [11] found that frequent use of mobile phones is correlated with academic difficulty and failure among university students. [12] as cited in [1] avers that the social networking sites and blogs which are being used today with tremendous passion and zeal have transformed the way of using internet in recent years by describing online tools and utilities which allow users for communication, participation and collaboration of information online. Today's young generation, especially teens and youth are using technology through innovative ways due to which they are referred to as millennials and have changed the ways we think, work and communicate even though they are in formative years of their life. Today's youth because of these social networking sites have become technology addicts and are quite introverted. [13] examined the impact of facebook on undergraduate academic performance and submitted that social media have negative impact on students. According to the study, the more students use facebook, the more it affects their academic performance. [14] stated that a research study on the mechanisms of media effects on academic outcomes reported that the widespread use of media among college students may compromise academic performance. The study also shows that the use of social media on cell phones may lower the grades of female students. [15] in a study on the use of social media among students of Ohio Dominican University observed that the grade point averages of students who use social network are significantly lower than that of students who do not use social networks. [16] noted that most of the younger students use social networking sites mainly for socialising activities, rather than for academic purpose. [16] further observed that most of the students do feel that social networking sites have more positive impact on their academic performance. In another study conducted by [17], it was revealed that students use social network mainly for making friends and chatting. The result showed that only 26 percent of the students (respondents) indicated that they use social media for academic purpose. Different research results show that the internet and social media are important factors that can influence educational performance of students positively or adversely in modern school environment. Parents and school administrators and other stakeholders also show concern over the alarming rate at which students make use of the internet and participate in social media interaction resulting in less dedication and time to study. Despite these worries, many students continue to utilize these sites on a daily basis. It is against this background that this research examines the impact of social media on the academic life and performance among Polytechnic students in Ogun State, Nigeria.

II. STATEMENT OF THE PROBLEM

Social networking sites and applications - Yahoo Messenger, Facebook, Blackberry Messenger (BBM), Google talk, Google plus, skype, snapchat, WhatsApp, e.t.c. are used by most people to interact with old and new friends, physical or internet friends. There have been a lot of debates on various platforms and media as to the impact that social media have on society and its effect on academic performance of students. Previous studies reported drop in students' grades and academic performance, and lack of time for studies as consequences of social media network participation and a high addiction rate among students, use of more time on social networking sites than in academic activities, wrong usage of grammar and spelling in social media discourse as well as distracting students from their studies. As a result of perceived available opportunities to be

harnessed from social media and the growing use of the social networking sites, students at all levels of higher education now have divided attention to studies. Technology is a double-edged sword, as such people's perceptions are diverse on the widespread adoption of social media among students. Hence, this study investigates the extent of usage of social media among Polytechnic Students and the impact of the social media on the academic performance.

III. OBJECTIVES OF THE STUDY

The purpose of this study was to determine the influence of social media participation on academic life and learning outcomes among Polytechnic Students in Ogun State, Nigerian. The study seeks to ascertain whether social media use among Polytechnic Students reduce their commitment to academic activities and time devoted to study. It was also the aim of this study to examine the relationship between social media use and academic performance of the students.

IV. HYPOTHESES

1. Participation in social media networks will not impair students' dedication to academic activities.
2. Social media use has no significant negative impact on academic performance of students.

V. METHODOLOGY

This study used the survey design to examine the characteristics studied. The study was carried out at the Federal Polytechnic, Ilaro, Ogun State. The study population involved all students of the Institution but the sampling was limited to only Higher National Diploma students. Hence, the sampling was purposive and simple random sampling was then used to select a total of 350 Higher National Diploma students from the five schools of the Polytechnic, that is, Pure and Applied Sciences, Communication and Information Technology, Engineering, Environmental Studies and Management Studies. 70 HND students were selected from each of the School to make the sample size. Questionnaire was the main instrument used for collecting data. The questionnaire was divided into two sections – Section A was designed to specifically collect information on the social media networks mostly used by the students, the purpose for which the social media platforms were used while Section B contains questions on the effect of the social media use on the students academic performance. The instrument was pretested on students of Moshood Abiola Polytechnic to determine its reliability and validity. Out of the 350 questionnaire distributed, 338 was completed and retrieved from the students. This represents 97 percent of the total questionnaire administered.

VI. RESULTS

The data generated were analysed using percentage, frequency counts, mean and standard deviations through the use of Statistical Package for the Social Sciences (SPSS). It is important to note the following which were used in the data analysis of this work. In Section B of the questionnaire, respondents were provided with options on a 4-point Likert Scale, that is, SA = Strongly Agree, A = Agree, SD = D = Disagree and Strongly Disagree, which were then analysed for testing the hypotheses.

Table 1: Analysis of Responses on favourite Social Media networks mostly used by students of Federal Polytechnic, Ilaro, Ogun State.

Social Media platforms	Frequency	Percentage
Facebook	149	44
Skype	1	0
Instagram	27	8
Whatsapp	132	39
Twitter	5	1
BBM	21	6
LinkedIn	2	1
Total	337	100

The above table indicates the social media platform which the students considered as their individual favourite social networks and are mostly used. The percentage count indicates that Facebook is the most widely used social media platform among the students with 44% and followed by Whatsapp with 39 %. The above table is depicted in the chart below:

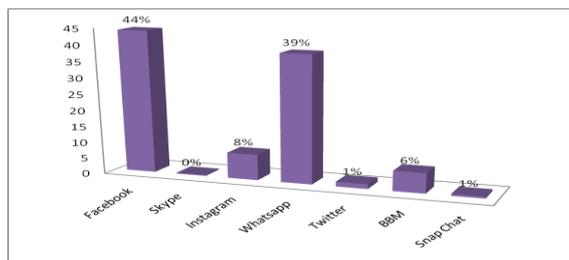


Table 2: The purpose for which students use social media networks

Social Media platforms	Frequency	Percentage
Chatting	146	43
Downloading Music/Video	22	7
Uploading Music/Video	25	7
Posting Photos	124	37
Exchanging ideas with classmates	21	6
Total	338	100

Field Survey, 2017

Table 2 shows the purposes for which students visit social media sites. The responses indicated that the social media platforms were mostly used by students for chatting and posting of photos. 43% and 37% of the total responses were indicated for chatting and posting of pictures respectively. Other purposes as indicated in the table are downloading and uploading of music and videos, while the students indicated that they exchange ideas with their classmates on an average response of 21%. The above frequency table is depicted by the chart below.

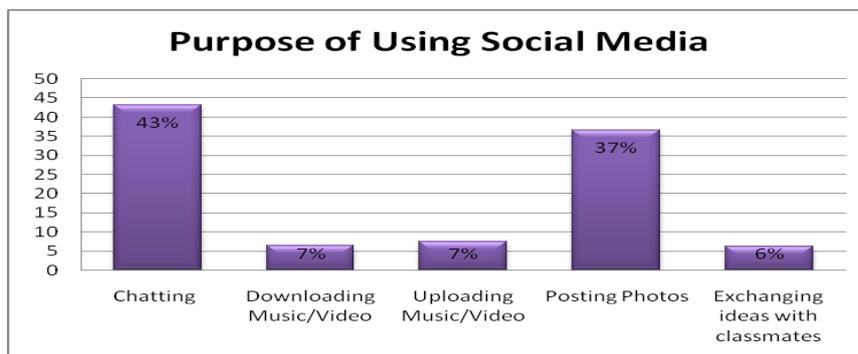


Table 3: Class of Cumulative Grade Point Average (CGPA) of Sample

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00 - 2.49	18	5.3	5.3	5.3
	2.50 – 2.99	193	57.1	57.1	62.4
	3.0 – 3.49	105	31.1	31.1	93.5
	3.50 – 4.00	22	6.5	6.5	100.0
	Total	338	100.0	100.0	

Source: Field survey, 2017

Table 4.1.3 analyzed the class of cumulative grade point average (CGPA) of the respondents. It showed that 18(5.3%) of the respondents were between 2.00 – 2.49, 193(57.1%) of the respondent were between 2.50 – 2.99, 105(31.1%) of the respondents are between 3.0 – 3.49 and 22(6.5%) of the respondents were between 3.50 – 4.00.

Table 4: Frequency Counts and Mean Values

Social Media and Students' Dedication to Academic Activities	SA	A	D	SD	mean
Students devote much time to using the social media than reading books.	96	110	67	65	2.701183
Students use social media to chat even during classes.	75	77	99	87	2.414201
Students' assignments suffer as a result of social media use	97	94	75	72	2.639053
Students always think of having access to their favourite social networks	119	132	43	44	2.964497
Students who use social media during classes are likely not grasp the content of the lecture	156	114	43	25	3.186391
Online social media distract students from their study	132	90	51	65	2.85503
Social Media and Students' Academic Performance	SA	A	D	SD	X
Social media make students to lose focus of their studies	120	143	34	41	3.011834
Students now rely on social media to get information about class activities	85	115	63	75	2.621302
Reliance on information from class group encourage absenteeism	43	73	110	112	2.139053
Exposure to social media have negative effect on students' academic performance	99	110	66	63	2.724852
Participation in social media may result in poor academic performance	98	111	69	60	2.730769
Addiction to social media networks usually results into drop in CGPA	113	109	56	60	2.813609

Field Survey, 2017

For the two hypotheses, the following were generated

Table 5: Model Fitting Information				
Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	879.787			
Final	3.406	876.381	39	.000
Table 6: Pseudo R-Square				
Cox and Snell	.925			
Nagelkerke	.994			
McFadden	.970			

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	3.406 ^a	.000	0	.
Q4	23.406 ^b	16.206	6	.041
Q10	63.015 ^b	59.609	6	.000
Q11	21.660 ^b	18.254	9	.032
Q14	14.194 ^b	8.788	6	.002
Q15	20.932 ^b	17.526	6	.003

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

- This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom
- Unexpected singularities in the Hessian matrix are encountered. This indicates that either some predictor variables should be excluded or some categories should be merged.

VII. DISCUSSION

Table 5 gives a log likelihood ratio of the model summary in which all the parameter co-efficient are non-zero based on the chi-square value of 876.381 with a significant value of 0.000 which less than the critical value of 0.05%. Table 7 shows the likelihood ratio test and shows that the difference in the 2log likelihood between the final model and the reduce model is given as 0.000 and coefficient of the parameter for each factors are 16.206 (Students devote much time to using the social media than reading books), 59.609 (Online social media distract students from their study), 18.284 (Social media make students to lose focus of their studies), 8.788 (Exposure to social media have negative effect on students' academic life) and 17.526 (Participation in social media may result in poor academic performance). From the likelihood ratio test it revealed that the chi-square calculated value is 8.788 with significant value of 0.002. Since the significant value is less than 0.05%, we reject the null hypothesis as the P-value is 0.001 which is less than critical value of 0.05 Therefore, we accept the alternate hypothesis and conclude that participation in social media networks will impair students' dedication to academic activities.

Also, the likelihood ratio test revealed that the chi-square calculated value is 17.526 with significant value of 0.003. Since the significant value is less than 0.05%, we reject the null hypothesis since the P-value is 0.001 which is less than critical value of 0.05. Therefore, we accept the alternate hypothesis and conclude that Social media use has negative impact on students' academic performance. From the results, we reject the null hypothesis that participation in social media networks will not impair students' dedication to academic activities and the alternate hypothesis is accepted. This implies that students' participation in social media platforms impair their dedication to academic activities. This result clearly indicates that majority of Students participate on social media platforms and devote much of their time to using the social media than reading books. This social media addiction is also reflected in the use of the platform during lectures as student always like to keep themselves updated on their favourite social media networks as indicated in Table 4. These on the whole result in poor dedication to academic activities. This results is in tandem with [8] that students at all levels of learning now have divided attention to studies, as a result of social media and [7] that internet addiction is significantly and negatively related to students' commitment to academic activities.

The results also indicate a rejection of the second null hypothesis that social media use has no significant negative impact on academic performance of students. It was found that Social media use by the students leads to loss of focus on studies as students now rely on social media to get information about class and school activities. Students' addiction to social media networks was also found to result into poor performance and drop in cumulative grade points of the addicted students. This shows that students use of social media as negative impact on academic performance. This corroborates [9] that social media sites have negative effect on students' academic performance. The result also supports [14] that the widespread use of media among college students may compromise academic activities and learning outcomes.

VIII. CONCLUSION

This study examined the effect of social media use on the academic performance of students in Federal Polytechnic, Ilaro, Ogun State, Nigeria. The study shows that a large percentage of student of Federal Polytechnic, Ilaro use smart mobile phones with facility and applications for social media and they use social media platforms mostly for social activities. This habit reduces the amount of time dedicated to study. The result indicates that the students use the social to upload pictures, download music and chat with near and distant friends. Addictions to social media make some students to use the platform even during lectures. It is concluded that social media use among students of the Federal Polytechnic, Ilaro is high and this impairs their devotion to academic activities and contribute to drastic fall in reading culture among the students. The study also concludes that excessive participation of student on social media networks and consequent addiction to the social media could result in poor academic performance among of the addicted students.

IX. RECOMMENDATIONS

Based on the foregoing, it is recommended that:

- Lecturers, parents, guardians and sponsors should always make efforts to educate students on the adverse consequence of excessive use of social media on their academic performance. This should be a continuous exercise to ensure that students' addiction to social media especially for social activities alone is reduced.
- Students should make efforts on their own to reduce the amount of time spent on social activities via the social media network and make use of the technology for the purpose of learning and research.
- Use of mobile phones and other smart devices during lectures should be frowned at in polytechnics and other institutions of learning while management of the schools should impose punitive sanctions on erring students.

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